GIFTED ADOLESCENT GIRLS: SELF-PERCEPTIONS OF ABILITY
WITHIN ONE MIDDLE SCHOOL SETTING

By

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Every person is, in part, "his own project" and
makes himself. Growth forward . . . requires
courage and strength in the individual as well
as protection, permission, and encouragement from
the environment.

<div align="right">-- Abraham Maslow</div>

To Louis Geczy

me to become a better teacher. It is difficult to adequately thank these individuals for their support and guidance during the last several years.

To the girls, teachers, and mothers who opened their lives to me I am most grateful. I have appreciated their trust, friendship, and warm welcome, without which this study could not have been completed. In addition, I would like to thank the many other middle school students who offered their opinions and humorous anecdotes for inclusion in my field notes.

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My mother, sisters, and brother have offered their love, encouragement, and support. Their faith in me has given me the strength and desire to complete this difficult task.

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The purpose of this study was to investigate in detail the
experiences of gifted adolescent girls in one middle school, de-
lineating the social-interactional factors which influenced ability
perceptions and attitudes toward achievement. The researcher assumed
a social-interactionist perspective by which self-perceptions of
ability were viewed as the interaction of gifted girls' attitudes,
perspectives, and values with variables inherent in the school environ-
ment. The study focused on two guiding questions:

  (1) What kinds of experiences do gifted girls have as members of
       heterogeneous teams and homogeneous gifted classes?

  (2) How do they use these experiences to construct behavior and
       beliefs about ability?

Qualitative research methods were used to collect and analyze data.
Observations were conducted on the gifted classroom and interdisci-
plinary teams for 200 hours the last five months of the school year.
These observations focused on gifted girls' achievement-related behavior

inside and outside classrooms, their interactions with teachers and peers, and their speech messages about achievement and ability. Formal and informal interviews were conducted with the gifted girls, their teachers, and five mothers. In addition, work samples, journals written by the girls, and cumulative school records were examined.

Data analysis revealed three factors which influenced the formation of gifted girls self-perceptions of ability. These factors included the following: multiple definitions of giftedness held by significant others, affiliation needs, and social comparison.

The majority of gifted girls described themselves as having potential rather than ability. They believed their achievements resulted from effort, and their failures from lack of motivation. These perceptions were found to be the result of a cyclic process in which gifted girls used school experiences to interpret and modify their beliefs and attitudes about achievement, and, in turn, these beliefs and attitudes guided their choices of behavior at school. Specifically, the variables which seemed to be related to gifted girls' self-perceptions of ability were the nature of student-teacher relationships within teams, the belief that social competence was an important area in which to achieve, and the girls' entering views about themselves.

BACKGROUND FOR THE STUDY

The unique characteristics of gifted girls have recently received increased attention in light of the literature which illustrates that more adult males than females are identified as gifted (Goertzel & Goertzel, 1962; Goertzel, Goertzel, & Goertzel, 1978; Terman & Oden, 1959). "Even though gifted girls tend to earn higher grades in school and the prevailing stereotype of females includes superior performance in English, foreign languages, and the arts, the adult productivity of males is superior in all areas" (Callahan, 1981, p. 499).

Experts in the area of gifted education are concerned about the loss of contributions of gifted and talented women to society, but research has failed to account for what appears to be a lack of achievement motivation in bright women. Gifted adolescent girls' beliefs about ability, a central component in achievement motivation, may have great bearing on their accomplishments in later life.

Statement of the Problem

The purpose of this study was to investigate and describe gifted adolescent girls' self-perceptions of ability within one middle school. Studies which have focused on gifted girls or women have

concentrated on personality characteristics or career-ability conflicts, but no studies have investigated self-perceptions of ability within specific settings.

The way students come to think about their abilities is a function of social experience (Maehr, 1974). This is particularly true for adolescents who, at this developmental stage, use group standards generated by social comparison to assess their achievements (Covington, 1984). For the adolescent girl, the impact of social experience on ability perceptions may be even more pronounced. Research has indicated that females are more sensitive to negative teacher or peer feedback and that, as they grow older, females rate their abilities lower than males (Brophy & Good, 1974; Maccoby & Jacklin, 1974). Theorists postulate that females, to a greater degree than males, define themselves in relation and connection to other people (Chodorow, 1974). Therefore, when teachers and peers accept, reject, encourage, or restrain, they may be affecting not only the present achievement-related behavior and ability perceptions of girls, but they may also be creating images that affect girls' future motivations and aspirations. The goal of this study was to describe and explain the experiences of gifted adolescent girls in one school, delineating social-interactional factors which influence ability perceptions and attitudes toward achievement.

Significance of the Study

While much of the theory and research on ability perceptions has resulted from studies which have been conducted with adult subjects

and in laboratory settings, the focus of this study was on the school
contexts in which students' self-perceptions of ability develop. The
growing body of research conducted thus far on students' perceptions
of school experiences has indicated that students consciously attempt
to make sense of the social and cognitive aspects of school. These
studies have characterized students as active interpreters of classroom
experiences, sensitive to "the differential behaviors that teachers
might display toward various groups of students, such as high and low
achievers and boys and girls" (Weinstein, 1983, p. 302). An examina-
tion of school experiences as they relate to the formation of ability
perceptions, then, can provide information about how gifted girls come
to view and understand their own abilities relative to others.

Mishler (1979) has pointed out that the tendency for researchers
to apply the methodology developed in the natural sciences to the
investigation of social processes has resulted in context-stripping
methods which seek to formulate universal laws. Thus, the importance
of context has largely been ignored. By focusing on the school
contexts in which gifted girls' self-perceptions of ability occur,
this study attempted to investigate the possible environmental factors
which may influence the development of ability perceptions and
achievement-related behaviors in bright girls who are regularly
removed from the classroom to participate in special instruction.
The possibility of environmental conditions which would seem to affect
the motivation and achievement of gifted and talented females was noted
by Callahan (1981) who suggested that we have little conclusive

evidence because these conditions are "perhaps untestable in the experimental traditions" (p. 502).

This study may also yield a number of contributions to both practice and research as they relate to the psychosocial development of gifted adolescent girls. The need for such research has been illustrated by the recent formation, in Florida, of a task force to examine middle childhood education, and to make recommendations concerning program structure, organization, curriculum, and student services. This task force has found that students in grades four through eight "must accomplish a number of developmental tasks, and middle childhood programs must recognize the developmental diversity and needs of students" (Speakers Task Force on Middle Childhood Education, 1983, p. V-2). Based on the task force's work, a bill entitled Progress in Middle Childhood Education (HB830) has called for new course requirements in math, science, and social studies for middle grade students. This study will add to practitioners' knowledge about the developmental diversity of gifted middle school females and illustrate curricular needs for this group. In addition, by providing detailed descriptions of the school experiences of gifted girls, this study will enable educators to come to know the world of school from the gifted girl's perspective.

> Educators today (should) evaluate their attitudes
> and behavior toward the gifted girls in the school
> system. In providing special education programs
> for the gifted we might unwittingly increase the
> conflict between sex-role expectations (and the en-
> suing pressure to conform) and the push toward
> independent thinking (and competition) for gifted
> girls without giving them the opportunity to be
> aware of and emotionally prepared for the ambiguous
> attitudes of the society in which they are growing
> up. (Werner & Bachtold, 1969, p. 1818)

The value of this study to practitioners can be summed up by examining the following facts. In the state in which this study occurred, the number of students entering gifted programs has increased by 65.83% over the last five years. Additionally, the tendency has been for students to enter these programs during their early elementary years and remain through high school.

This study will also be of value to researchers. In making recommendations about "high-priority research activities," Hill (1983, p. 1) cited his own work dealing with perspectives on adolescence and indicated that a first priority was studies of "attachment, autonomy, sexuality, intimacy, achievement, and identity" (p. 1), because presently available studies are only incidentally related to adolescence and focus mainly on males. Additionally, Callahan (1981) has noted that the effects of programs for gifted students have not been systemtically studied. Therefore, implications concerning the sociological or affective effects of participating in enrichment programs on gifted females cannot be drawn from existing research.

Definition of Terms

1. Gifted: A student selected by state criteria which stressed superior development and the capability of advanced performance. The tested mental capacity of these students is two standard deviations or more above the mean, that is, an IQ score of 130 or more.

2. Self-perception of ability: The individual's beliefs about her competency to carry out the behaviors expected of her.

3. Middle school: "A school of some three to five years between the elementary and high school focused on the educational needs of students in these in-between years and designed to promote continuous educational progress for all concerned" (Alexander & George, 1981, p. 3).

4. Context: The physical settings in which an event occurs. It is "the constellation of norms, mutual rights, and obligations that shape social relationships, determine participants' perceptions about what goes on, and influence learning" (Gumperz, 1981, p. 5).

5. Interdisciplinary teams: Teachers from different subject areas who are organized into groups, assigned a common area of the school building, a common schedule, and the responsibility for a common group of students.

6. Advisor-Advisee (AA): A component of the middle school program created to meet the affective needs of early adolescents. Students meet regularly with an advisor for academic counseling and affective education.

7. Multiage grouping: The placement of students at various grade levels together for instruction.

Design of the Study

Upon receiving approval from the University Committee for the Protection of Human Subjects, the county school board, the parents of the participants, and the girls themselves, the researcher established an observation schedule which would assure that equal amounts of time

would be spent in the school areas in which gifted girls regularly interacted. Observations began in January, 1984, and were conducted until the final day of school in early June. The researcher observed 200 hours of classroom activity primarily representing Mondays, Wednesdays, and Fridays, and all times of the school day. Observations centered on gifted girls' speech messages concerning schoolwork, peers, teachers, and self-perceptions; achievement-related behaviors in school contexts; and interactions with teachers and peers before, during, and after school. Formal and informal interviews were conducted throughout the study. Those interviewed included the girls, their teachers, the school principal, and five mothers. In addition, examples of the girls' schoolwork, their personal journals kept in advisor-advisee and the gifted classroom, report cards, and cumulative records were examined.

Data collection and analysis were conducted as specified by Spradley (1980). This process required that data be organized into categories based on similarities. Taxonomies were then constructed to represent gifted girls' self-perceptions of ability by drawing data from across domains.

Scope of the Study

This study was conducted in one middle school and focused on the self-perceptions of ability held by the school's ten gifted females. These students included three sixth graders, two seventh graders, and five eighth graders. Observations and interviews were

conducted during the second half of the school year in two of the
school's three team areas and in the gifted resource room. Although
this study can provide insight into gifted girls' self-perceptions of
ability, specific findings from this study should not be generalized
to other populations.

In the following chapters a review of the literature, the
methodology, findings, and implications of the study are discussed.
In Chapter II, a review of the literature on the role of context in
the development of ability perceptions and studies related to gifted
adolescent girls' self-perceptions of ability are discussed.   In
Chapter III, the methodology is described. Chapter IV represents
the study's findings. Conclusions and implications are discussed
in Chapter V.

CHAPTER II

REVIEW OF THE LITERATURE

Research on perceptions of ability has attempted to answer two
different sets of questions. One set of questions has focused on the
feelings about ability that are produced when an individual success-
fully or unsuccessfully completes a task. The purpose of this research
has been to determine the types of feelings that lead to increased
achievement motivation on similar tasks. Researchers concerned with
these questions have been guided by attribution theory (Weiner, Frieze,
Kukla, Reed, Rest, & Rosenbaum, 1971), which proposes that an indi-
vidual's belief about the causes of success and failure affects future
achievement-related behavior, and self-worth theory (Covington & Beery,
1976), which proposes that achievement behavior can be explained in
terms of an individual's attempts to maintain a positive self-image.
Research stemming from these theories has generally been conducted
with adult subjects in laboratory settings. A second body of questions
has focused on possible environmental factors that may influence
feelings about ability. The purpose of this research has been to
determine how ability perceptions are formed. This body of research
has contributed to the recent development of ability formation theory
(Rosenholtz & Simpson, 1984; in press), which proposes that classroom
processes which contribute to a singular definition of ability lead to

stratification, and, therefore, make it less likely that students will develop alternative interpretations of ability.

The focus of the present study was on the school contexts in which gifted adolescent girls' self-perceptions of ability develop. For this reason the review of the literature will be organized in the following manner: 1) the contributions of the major proponents of attribution and self-worth theories to our understanding of ability perceptions will be summarized, 2) ability formation theory and studies related to early adolescents will be discussed, and 3) research related to gifted girls' ability perceptions and achievement behavior will be described.

Theoretical Framework: Attribution and Self-Worth Theories

Both the attribution and self-worth theories of achievement motivation have their roots in earlier "learned drive" theories which stressed the fundamental conflict between attempting success and avoiding failure (Covington, 1984). The most well-known of these theories, one which is still influential today, was developed by John Atkinson (1964) and David McCelland (1965). Atkinson found that the way individuals resolved the conflict between seeking success and avoiding failure depended upon differences in early childhood experiences. For this reason, much of the research stemming from this model has focused on the importance of childrearing practices in promoting or hindering the development of a positive orientation necessary to the pursuit of success (Winterbottom, 1953).

When Atkinson's and McCelland's theoretical model was applied to females, however, the results were contradictory. "Females' scores on the motivational measures do not correlate well with their actual achievement" (Stein & Bailey, 1975, pp. 151-152). In an attempt to resolve these major unexplained sex differences, Horner (1972; 1975) posited the motive to avoid success. Horner proposed that women who are most capable of achieving have a disposition to become anxious about achieving success as a result of expected negative consequences. Horner's work will be reviewed further under research related to gifted girls' ability perceptions.

Despite the contradictory results with female subjects which were obtained using this model, Atkinson's (1964) work influenced the development of both the attribution and self-worth theories of achievement motivation. Attributional theorists (Weiner et al., 1971) identified four major explanations about the causes of success and failure: ability, effort, luck, and task ease/difficulty. These individual perceptions of the causes of success or failure are believed to be responsible for individual differences in achievement motivation. That is, individuals who attribute success to a stable cause such as ability are more likely to persevere in the future than individuals who attribute success to an unstable cause such as luck. Thus, success-oriented individuals attribute their successes to ability and their failures to lack of effort. Failure-avoiding individuals attribute success to external factors such as luck, and failure to inability (Weiner et al., 1971; Weiner & Kuila, 1970).

In attribution theory the perception of effort has been seen as central to achievement motivation. If individuals fail after putting forth little effort, they are more likely to maintain a positive outlook on future attempts than if the degree of effort expended had been greater. Additionally, individuals who put forth high effort will show greater pride in success (Covington & Omelich, 1979; Weiner et al., 1971).

The self-worth theory (Covington & Beery, 1976) was a second spin-off from Atkinson's work. Like attribution theory, self-worth theory has characterized ability perceptions in terms of causality (Covington, 1984). Unlike attribution theory, students' beliefs about the causes of success have not been considered sufficient explanations for achievement behavior. Rather, self-worth theorists have postulated that students' achievement behavior can be explained by the motivation to maintain a positive self-image of ability and competence, especially when some risk is involved (Covington & Omelich, 1979).

In self-worth theory, "the basic assumption is that several factors influence one's sense of worth and adequacy, including performance level, self-estimates of ability, and degree of effort expenditure" (Covington, 1984, p. 8). While accomplishments are considered salient clues about ability, perceptions of high ability alone can imply worthiness. Like attribution theorists, self-worth theorists have viewed effort as a mediator, for without significant effort expenditure one's self-perception of ability will be unaffected by failure. Great expenditures of effort which result in failure, however, can lead to perceptions of incompetency that result in shame

(Covington & Omelich, 1979). According to self-worth theory, an
increased capacity for abstract thought among early adolescents and
increased competition in the classroom has contributed to this emphasis
on ability over effort (Covington, 1984).

The major difference between self-worth theory and attribution
theory is the motivational component. Specifically, self-worth theory
holds that students employ a variety of strategies to maintain a sense
of worthiness, and that the need to maintain this perception of worth
is the basic motivation for achievement behavior (Covington, 1984).

While there is much research to support both cognitive attribu-
tion and self-worth theory (see Weiner, 1980; Covington, 1984, for
reviews), the majority of this research results from studies conducted
with adult learners and in laboratory settings. Recently researchers
have pointed out that these theories fail to give adequate attention
to classroom context factors that may influence the formation of
ability perceptions (Blumenfeld, Pintrich, Meece, & Wessels, 1982;
Rosenholtz & Simpson, 1984; Weinstein, 1983). Other factors like
personal values and perceived consequences of success and failure may
be important in determining achievement-related behavior in the class-
room (Blumenfeld et al., 1982). Thus, little is actually known about
factors influencing early adolescents' self-perceptions of effort and
ability within the classroom setting. By considering the classroom
context, a more satisfactory theoretical perspective can be constructed,
for context variables may "alter the ways students learn to interpret
their own ability" (Rosenholtz & Simpson, 1984, p. 32).

Studies of the influence of context factors on ability formation may be particularly beneficial in understanding early adolescents' self-perceptions of ability. As Blyth and Traeger (1983) noted in a recent review of research on self-perceptions in early adolescence, at this stage in life, young people "are changing cognitively in such a way as to dramatically change the way they see and evaluate themselves. There may be changes in what is of central importance to them" (p. 95). Hill and Lynch (1983) argued that the effect of socialization and context-related variables on the formation of role-related achievement and ability perceptions of females may intensify during early adolescence. In the following section a set of studies which address the role of classroom context factors in the formation of early adolescents' ability perceptions will be reviewed.

Ability Formation Theory and Related Studies

Rosenholtz and Simpson (1984; in press) proposed a theory of ability formation in which context plays a primary role. The following four assumptions underlie this theory:

1. Intellectual ability is a relative concept and will be formed comparatively.
2. Students receive feedback from teachers and from their peers which should influence their ability perceptions.
3. The structure of students' academic tasks symbolically will imply conclusions about the abilities believed to determine performance at that level.
4. The way in which performance evaluations are organized and interpreted will provide a language within which students will cast their interpretations of ability. (Rosenholtz & Simpson, 1984, p. 36)

Ability formation theory has proposed that students come to accept institutional definitions of ability through the process of socialization. The more singular the picture students see and the more information which contributes to this picture, the less likely it is that students will develop alternative definitions of ability. From this perspective, what students believe to be real is, at least in part, socially structured (Berger & Luckmann, 1966). In addition, students, themselves, are considered active participants in their own socialization.

Rosenholtz and Simpson (1984) noted that certain characteristics of classroom organization are more likely to bring about shared definitions of ability, that is, a consensus among students and the teacher about who is most and least able. These characteristics include undifferentiated task structure, low student autonomy, student grouping patterns, and formal performance evaluations which are frequent and visible. Classrooms which can be characterized by these criteria are called unidimensional. Few student choices about activities and learning goals which would enhance alternative definitions of ability, and increasing stratification of students along a single dimension, facilitate the formation of shared perceptions of ability in these classrooms (Rosenholtz & Simpson, in press).

An important implication of ability formation theory noted by Rosenholtz and Rosenholtz (1981) was that studies of the effects of classroom organization on perceptions of ability should not be based on static models which characterize students as passive entities. Such a "perspective omits from consideration a variable likely to mediate

the impact of structure on self-evaluation of ability, the evaluative responses of others" (Rosenholtz & Rosenholtz, 1981, p. 133). Thus, the analysis of classroom effects should take into account conditions which affect actors' perceptions and the effects of those perceptions on individuals' self-perceptions of ability.

Several studies were conducted to test the assumptions which became the basis of ability formation theory. Rosenholtz and Wilson (1980) conducted a study to investigate whether different classroom organizations resulted in different interpretations of ability among students. Their sample consisted of 15 fifth and sixth grade classrooms in suburban and urban areas serving a working-class population.

Classrooms were selected based on interviews with principals concerning the degree of curricular complexity within the school. Specifically, the intent of the study was to determine if classrooms with low task differentiation, low student autonomy, and comparisons based on uniform criteria produce a climate in which the range of alternative definitions of ability narrows and consensus about a student's ability among classroom participants increases. Such classrooms were designated as high resolution classrooms, that is, "the structure offers a clear picture of student performance" (p. 76).

To measure the degree of resolution, questionnaires were administered to teachers who were asked to describe curricular methods and instructional practices through Likert fixed-choice responses. Questions asked related to the number of different materials a teacher used, how teachers organized student groups for instruction, how frequently students made choices about activities, and how frequently teachers compared one student's work with another.

Perceptions of ability measured in this study were limited to dimensions of reading instruction and were obtained through student-teacher questionnaires. Students were asked to rank order classmates by their ability to read. Peer rankings of individual students were then averaged, and a student's self-perception of ability was determined by the student's placement of self in the rank order. Teachers were asked to rate students' reading abilities as above average, average, or below average. The degrees of concurrence among classmates, between classmates and self, between classmates and teacher, and between teacher and self were obtained through these rank orders.

Rosenholtz and Wilson concluded that students in high resolution classrooms had fewer options to demonstrate competence and that, as a result, ability was more narrowly defined and a greater student-teacher consensus resulted. "The importance of classroom resolution may be in its power to shape students' subjective identities" (p. 81), but how this mediates the individual's self-perception of ability was not answered by this study.

Using the data obtained in the Rosenholtz and Wilson (1980) study, Rosenholtz and Rosenholtz (1981) investigated the ways classroom organization might affect individual self-perceptions of ability. They tested the following hypotheses: 1) self-evaluations of reading ability will be more dispersed in unidimensional as opposed to multi-dimensional classes, and 2) classmates' and teachers' evaluations will be more dispersed in unidimensional classes. Unidimensional classes were defined as high resolution classes.

The findings of this study indicated that in forming one's self-perception of reading ability, the relative influence of the teacher on the classmates and the teacher and classmates on the self was affected, in part, by the organization for instruction. In classrooms where fewer options were provided for students to demonstrate competence, definitions of ability became more narrowly defined. Grouping practices and task structures restricted students' options. Rosenholtz and Rosenholtz (1981) concluded that the effect was greater in situations where the classroom organization was unidimensional.

While the researchers stressed that the findings of this study were preliminary because they did not examine the criteria by which teachers and students made judgments and, therefore, could not assert causal relationships, the implications are important. Classrooms with narrow opportunity structures stratify students as compared to instructional climates which offer students more alternatives in terms of curriculum and evaluation. Rosenholtz and Rosenholtz (1981) concluded:

> To the degree that teacher, peer, and self-perceptions influence future performance, ability stratification as affected by classroom organization could have profound consequences for the individual's life chances. Instructional organization, then, may not only provide a framework by which classroom actors define ability, it may also enhance or limit capacity. (p. 140)

In a similar study of classroom structure and perceptions of ability, Simpson (1981) drew conclusions which supported the Rosenholtz and Rosenholtz (1981) study. Of the 16 classrooms included in his study, Simpson found that in unidimensional classes teacher ratings

of students in different academic subjects were more widely dispersed with a higher proportion of students in the below average range. In multidimensional classes there was less agreement between teachers and pupils on perceptions of ability.

The implications of the studies conducted by Rosenholtz and Rosenholtz (1981) and Simpson (1981) point to the importance of classroom structures which encourage more fluid, changing perceptions of ability to exist. Such classroom would allow more divergent student-teacher opinions and thus yield less restriction in performance interpretation.

A group of studies related to ability formation theory have investigated the active role students play in interpreting classroom reality. The following studies are unique because they investigate the effects of student perceptions of teacher and peer feedback on student beliefs about ability. The studies reviewed focus on the early adolescent age group.

Schmuck (1962; 1963) conducted a series of studies in which he investigated the relationships between students' perceptions of social status within a classroom, their actual social status as measured by sociometric devices, and the degree to which students' performances matched their academic abilities (utilization of abilities). His sample included 727 students from elementary, junior, and senior high schools in rural, urban, industrial, and university communities. Data included the following: results from questionnaires and interviews with students and teachers, intelligence scores obtained from student records, and brief observations in the classrooms of students in grades

three through twelve. In Schmuck's (1963) analysis, which centered on grades three through six, he found that students' perceptions of their status within peer groups were related to their utilization of abilities.

Further, Schmuck (1962; 1963) identified two types of classroom power structures. Centralized classrooms were those in which there was a high consensus among peers in the choice of the most and least powerful individuals, as shown by the smaller proportion of different students nominated in each category. Diffused classrooms were those in which there was less consensus about the most and least powerful individuals in the class. Schmuck found that students estimated their own status more accurately in centralized classrooms, and that high power students who correctly perceived their positions outperformed lower power individuals who correctly perceived their positions.

While the results of Schmuck's (1962; 1963) research showed that student perceptions of social status were related positively and significantly to their attitudes toward self and school, actual liking status showed no such significant relationship to attitudes toward self and school. Thus, Schmuck's results stressed the importance of student perceptions of self within the classroom. Further, this study supports the idea that high peer consensus may influence ability formations.

Schmuck's work left two questions unanswered. Would the results have been different if measures other than interviews with teachers had been utilized to divide students into high and low achieving groups (high and low utilizers of ability)? Would the results have been different if the analysis had concentrated on the upper grades?

Following Schmuck's research, Brookover, Thomas, and Patterson (1964) conducted a study of 1,050 urban seventh graders in which they tested the following hypotheses: 1) self-concept of ability is significantly and positively related to academic performance; 2) students have specific self-concepts of ability which correspond to specific subjects, and which are better predictors of performance within those subjects than the general self-concept of ability; and 3) students' perceptions of the evaluations significant others make of their abilities affect their self-concept of ability. A Self-Concept of Ability scale was administered in two parallel forms to measure a general self-concept of ability and subject-specific self-concepts of ability in each of the four major subjects. Intelligence scores obtained in the fourth and sixth grades were averaged and controlled. A measure of academic performance was obtained from grade point averages.

The results of the study conducted by Brookover et al. (1964) indicated that self-concept of ability and grade point average were significantly and positively correlated, despite the fact that ability was controlled. Interestingly, the specific self-concept of ability was found to be a better predictor of performance in mathematics, science, and social studies for males, though the same was not found to be true for females except in social studies. Correlation between the specific self-concept of ability and performance in English was slightly, but not significantly, lower than the correlation between the general self-concept of ability and performance in English. Brookover et al. suggested that the sex differences obtained in this study might reflect factors in the specific community and school system

or the cultural belief that math and science are considered inappropriate areas for female achievement. This, however, did not explain the inability of specific self-concept of ability to predict performance in English, an area generally considered appropriate for female achievement. Lastly, Brookover et al. found that the student's self-concept of ability is significantly and positively correlated with the perceived evaluations that significant others hold of the student. However, an individual's self-concept of ability is "more closely related to his estimate of general attitudes toward him than it is to the perceived responses of a particular group" (p. 277).

The findings of Brookover et al. indicated that student perceptions of peer ratings are strongly correlated to self-concept of ability. Additionally, in finding that students' ability perceptions are more closely related to estimates of general attitudes, this study suggests that student self-concepts of ability are influenced by a variety of sources which may extend beyond the school. This implication may be important in understanding the sex differences found in this study. Are the general attitudes which influence males' and females' ability perceptions made up of different subgroups? In finding that a specific self-concept of ability was not a better predictor of achievement for females in science and math than the general self-concept of ability, this study raises the additional possibility that perceptions of others' evaluations may be more powerful for adolescent females.

Pittman (1979) addressed some of these issues in a study conducted to explore the importance of parents, teachers, peers, tests, and self-evaluation on the development of students' self-perceptions of

achievement. The Intellectual Achievement Responsibility Questionnaire (IAR) was administered to 1,192 sixth and seventh grade students in six school systems in North Carolina. The IAR was used to measure students' perceptions of internal control in achievement situations in which one influence, either parents, teachers, peers, or self-evaluation was prominent. Student responses were analyzed separately by sex using factor-analytic procedures.

The findings of this study indicated that, for both male and female early adolescents, parents and teachers played more significant roles in the development of students' perceptions of internal control in achievement situations than peers, tests, or self-evaluation. However, in analyzing student responses by sex, Pittman noted that the relationship of the home environment with achievement was stronger for females than males. Thus, Pittman concluded that parents and teachers are significant, possibly critical influences, on the development of early adolescents' perceptions of achievement. The results of the study also indicated that the significance of peers was second to the parent/ teacher factor in its influence on achievement perceptions.

In concluding that the home environment had a stronger influence on females' beliefs about their achievement, this study raises the question that community influences may also be more significant on females' achievement perceptions. Is the influence of parents on females' beliefs about ability different or more significant in a rural or urban community?

A growing body of research has investigated the influence of teacher expectations on student performance (see Braun, 1976; Brophy,

1983; Cooper, 1979, for reviews). These studies, conducted by outside observers, have identified teacher behaviors which correlate with teacher expectations for students at different ability levels. From this perspective, teacher expectations become self-fulfilling prophecies. The students' role in this process was recently investigated by Weinstein, Marshall, Bratesani, and Middlestadt (1982). Rather than observing teacher behaviors, these researchers investigated student perceptions of the evaluative responses of teachers.

Weinstein et al. used the Teacher Treatment Inventory to measure fourth, fifth, and sixth graders' perceptions of the frequency of 44 teacher behaviors toward a hypothetical male or female, high or low achieving student. The sample of 243 students came from 16 classrooms in 4 urban schools of varying socio-economic levels. The items on the instrument were derived from reviews of the literature on the rela- tionship between teaching behavior and student achievement, on the expression of teacher expectations in behavior, and on student per- ceptions of the classroom environment. Subjects were asked to pretend that Anne (John) was a student in their class, and, using a Likert forced-choice scale, rate how frequently their own teacher would work with Anne (John) in the ways described.

The results of this study indicated that student perceptions of differential treatment do exist regardless of the sex of the target student rated. Neither the sex nor the achievement level of the sub- ject influenced student perceptions. The results also indicated that the differences students perceived were largely consistent with studies of teacher expectations conducted by outside observers. That is,

students believed low achievers were given greater help, input, and structure.

This study of student perceptions of differential teacher behaviors raises important questions. Would high ability students who have low self-concepts of ability prefer teachers who give more help, input, and structure? If so, would these same high ability students behave in ways which would make additional teacher attention more likely, thus causing teachers to question their ability?

Parsons, Kaczala, and Meece (1982) conducted a study which investigated individual student-teacher interactions in 17 junior high math classes. In this study of predominantly seventh and ninth grade students, the researchers looked at 1) the possible influence of student sex or teacher expectations for individual students on the nature of student-teacher interactions, and 2) the effects of variations in teacher-student interaction patterns on student attitudes.

Student measures used in this observational study included questionnaires containing a seven-point Likert scale to assess expectancies, self-concept of ability, and concepts of task difficulty; scores from standardized tests; and students' ratings as to how well they believed their teachers expected them to do in math. Questionnaires were also used to obtain teacher expectancy scores for individual students, thereby placing them in low or high expectancy groups according to sex. Trained observers then coded classroom interactions between teachers and individual high and low-expectancy students focusing on the following: 1) type of interaction, 2) who initiated it, 3) type of student response, 4) type of teacher feedback, and 5) whether the

interaction was public and monitored by the class or a private teacher-student interaction.

The results of the study indicated that girls, as a whole, received less criticism than low-teacher-expectancy boys, and that high-teacher-expectancy girls received less praise than the other groups. Though differences were small, low-expectancy boys received the most criticism and low-expectancy girls the most praise, especially in response to teacher controlled questioning. In general, boys had the most inter-actions of all kinds with their teachers. These variations in teacher-student interactions were found to affect male and female self-perceptions of ability differently.

In this study, praise was found to have a positive relationship with boys' self-perceptions of ability but it was not so for girls. Rather, for girls, praise was predictive of their belief that math was easy. Parsons, Kaczala, and Meece (1982) concluded that this may have resulted from teachers' differential use of praise, that is, that praise given to boys conveyed teacher expectations while praise given girls was more random and focused on low-expectancy girls. Noted the researchers, "it is the informative value of praise with regard to teachers' expectations which is critical" (p. 336).

This study raises several important questions. Does more criticism for low-expectancy boys imply to students that math is more critical for males? Does more praise for low-expectancy girls imply to high-expectancy girls that praise is related to task ease, thereby resulting in inaccurate estimates of ability?

Mason and Stipek (1985) investigated students' self-perceptions of performance, their attributions for success and failure, their achievement-related behavior, and their actual performance in math and reading. The sample included 77 fourth and fifth graders of various socio-economic backgrounds from 17 different classrooms in four schools. Data on 29 of the students from this sample were gathered across two years from 1982-1984.

The methods of data collection included observations of students while engaged in classroom tasks and interviews with students. During these interviews students were asked to rank their performance compared to classmates in reading and math, and to describe situations in which they had succeeded or failed. They were then asked to choose the most important cause of their success or failure by selecting from among ability, effort, luck, or task difficulty. Students' emotional responses were measured by asking to what degree they felt bored, confused, dumb, embarrassed, smart, happy, or proud while working on tasks in math and reading. Finally, teacher ratings of students' performances and students' percentile rankings in math and reading were obtained.

Mason and Stipek reported that their findings from this study were not surprising. High self-perceptions were associated with positive emotions and a belief in ability. Low self-perceptions were associated with negative emotions and a belief in lack of ability. However, these researchers emphasized that students' perceptions of how well they were doing predicted the degree to which they experienced positive or negative emotions while working on tasks better than how well they were actually doing. Thus, student perceptions may influence task

commitment more than actual feedback. Additionally, Mason and Stipek found that student behavior and perceptions were relatively stable across two years, thus suggesting that students enter new classrooms not only with varied skill levels the teacher must consider, but also with a set of achievement-related beliefs and perceptions.

Important questions are raised by the implication that students' perceptions about their ability on tasks may influence task commitment more than actual feedback. What criteria do students use in forming task-specific perceptions of ability? Do personal values or values attributed to the task itself affect perceptions of ability? Do perceived consequences of success or failure on specific tasks affect perceptions of ability before a student begins a task?

In a related study, Weinstein, Marshall, Botkin, and Sharp (1985) investigated the development of student performance expectations in high differential and low differential classrooms over one school year. While this study focused on 579 students in 30 first, third, and fifth grade classrooms rather than early adolescents, the findings suggested that "student awareness of specific teacher expectations is only apparent at the fifth grade level and only here influenced by the classroom context" (pp. 2-3). Thus, this implies the importance of student perspectives and classroom context for the development of older students' self-perceptions of ability. Based on their findings, Weinstein, Marshall, Botkin, and Sharp (1985) concluded, "perceived teacher expectations may prove more critical than actual teacher expectations in predicting student expectation and achievement outcomes" (p. 30).

Taken together, these studies of the effects of classroom context factors on the formation of early adolescents' ability perceptions suggest, foremost, the importance of student perceptions of self in the classroom. Perceived evaluations of significant others affect student attitudes toward self and school (Schmuck, 1962; 1963; Weinstein et al., 1982; Weinstein et al., 1985), the formation of self-concept of ability (Brookover et al., 1964; Parsons et al., 1982), and related beliefs about achievement (Pittman, 1979). In addition, student perceptions of performance predict emotional involvement in tasks better than actual performance evaluation (Mason & Stipek, 1985). Finally, the research suggests that student perceptions of self are influenced by classroom organization in which unidimensional structure leads to the perception of ability as a single dimension, thereby facilitating self-perception of ability in agreement with student-teacher consensus (Rosenholtz & Rosenholtz, 1981; Rosenholtz & Simpson, 1984; Rosenholtz & Simpson, in press; Rosenholtz & Wilson, 1980; Weinstein et al., 1985).

In this review several studies have indicated sex differences in students' beliefs about ability and achievement (Brookover et al., 1964; Parsons et al., 1982; Pittman, 1979). In the final section of this review, literature which relates to gifted adolescent girls' self-perceptions of ability will be considered.

Gifted Adolescent Girls: Studies Related to Ability Perceptions

Little research has focused on the gifted adolescent female (Blaubergs, 1980; Joesting & Joesting, 1970; Shakeshaft & Palmieri,

1978), and virtually no studies have been conducted to investigate the gifted girl's formation of self-perception of ability. Since the 1970's, however, the literature has grown to include studies within two specific topic areas: the mathematically gifted female and the personality characteristics of females working in various professions (Blaubergs, 1980). This literature has grown in response to increasing concern that accomplishments of gifted females do not compare with those of males in adulthood. Of particular importance to the issue of achievement motivation are studies which investigate obstacles to women's achievement.

In her review of the literature on sexist barriers to gifted women's achievement, Blaubergs (1978) addressed this issue. After reviewing literature related to external barriers, lack of institutional and societal support, and personality characteristics, she concluded that "internal barriers to achievement faced by gifted women and girls have been overemphasized" (p. 21), and that those which are realities result from the consequences of socialization.

Similar conclusions were reached by Hill and Lynch (1983) in their review of gender-related role expectations during early adolescence. While Hill and Lynch did not limit their review to gifted girls, their finding supported Blaubergs's (1978) conclusion that socialization influences achievement behavior. As Hill and Lynch noted, "Evidence discussed . . . suggests that girls' achievement behavior changes during early adolescence, but little research is available on the determinants of this change" (p. 209). From their review of the research they concluded that, during early adolescence,

standards for achievement become more sex-stereotyped and girls become
more concerned with interpersonal areas of competence than boys.

Other reviews of research on sex differences in achievement motiva-
tion suggest that females may be motivated to achieve by a desire for
approval and affiliation, rather than a desire to attain a standard of
excellence (Crandall, 1967; Hoffman, 1975; Rubovits, 1975; Sherman,
1975). However, using a different interpretation of many of the same
studies reviewed by the above researchers, Stein and Bailey (1975)
argued that "the social context of females' achievement has been mis-
interpreted as evidence for affiliation as opposed to achievement
motives" (p. 152). They proposed that social acceptance, itself, is
a central area of achievement for females; thus females are motivated
to achieve a standard of excellence in this area.

In her investigation of sex differences in achievement motivation,
Horner (1972; 1975) posited that women have "a disposition to become
anxious about achieving success because they expect negative conse-
quences as a result of succeeding" (1975, p. 207). In a study she
conducted with Rhoem in 1968 (Horner, 1975) to observe the incidence
of fear of success imagery in female subjects at different ages,
Horner found that seventh grade girls, when given the clue, "Sue has
just found out she has been made valedictorian of her class," exhibited
a 47% incidence of fear of success.

Other studies conducted to test Horner's concept have provided
conflicting results. In a dissertation study conducted to find
evidence of the motive to avoid success in ten to fourteen year old
females, Cook (1976) found that support for the existence of a motive

as defined by Horner did not exist in her sample of 105 fifth through
eighth grade females in a parochial school. However, the girls did
show fear of negative consequences which might occur as a result of
deviating from traditional sex-role patterns. This fear of negative
consequences increased with the grade level of the subjects. Conversely,
Lavach and Lanier (1975), in testing Horner's concept with seventh
through tenth grade high-achieving girls, found that the motive to avoid
success was prevalent and aroused by situations involving successful
competition with males. These studies suggest that, while there is
conflicting data about the motive to avoid success, adolescent girls
do experience a fear of negative consequences which might result from
behavior not considered feminine.

Studies which have investigated differential behaviors of gifted
adolescent girls in classroom situations have indicated that bright
girls have less confidence in their abilities than bright boys. For
example, in a study of creative ninth grade students, Kurtzman (1967)
found that more creative boys were more self-confident and mature than
less creative boys, but that no difference existed between more and
less creative girls. Kurtzman also found that more creative girls were
less well accepted by peers. Walberg (1969) came to similar conclu-
sions in his study of senior high students who participated in Harvard
Project Physics. Girls had more cautious attitudes, behaved in con-
forming, docile manners, and seemed uninterested in risk-taking.

In a review of the literature on gifted women, Morse and Bruch
(1970) noted "most of the literature and research findings available
for discussion have contributed much more to the articulation and

recognition of the problems than to their solution" (p. 31). It
appears that sex-role stereotyping may increase in adolescence (Hill &
Lynch, 1983) and that the achievement motivation of gifted women may be
affected by socialization (Blaubergs, 1978). Sex differences in
achievement motivation may also point to the importance of affiliation
and acceptance (Crandall, 1967; Cook, 1976; Hoffman, 1975; Horner,
1972; 1975; Lavach & Lanier, 1975; Rubovits, 1975; Sherman, 1975).
Finally, researchers who have investigated gifted adolescents in class-
room settings have noted that gifted girls lack confidence and behave
in conforming manners (Kurtzman, 1967; Walberg, 1969). Nevertheless,
questions about gifted girls' perceptions of ability and achievement
remain. It is still not clear what factors influence gifted adolescent
girls' perceptions of social norms that may hinder achievement. Nor
is it known if gifted girls are motivated by affiliation or if, as
Stein and Bailey (1975) proposed, affiliation is perceived as an area
of achievement itself, much like leadership or scholarship. Most
importantly, it is not clear how classroom structure and the perceived
evaluations of significant others influence the formation of ability
perceptions in students who enter classrooms already identified and
publicly labeled as able--gifted girls. What consequences do gifted
labels have on the formation of girls' self-perceptions of ability
within classroom contexts? The purpose of this study is to address
some of the unanswered questions in this area of research.

CHAPTER III

METHODOLOGY

The Research Perspective

The purpose of this study was to explore and describe gifted
adolescent girls' self-perceptions of ability and achievement within the
context of one middle school setting. The students studied were members
of heterogeneously organized interdisciplinary teams four days a week
and attended homogeneously grouped gifted classes one day a week. The
study focused on the girls' definitions of achievement and ability,
their perceptions of the relationship between the two constructs, and
the effects of the school culture (i.e., organizational features,
student-teacher relationships, and peer group influences) on these
perceptions. Ethnographic techniques, methods of data collection and
analysis which enabled the researcher to investigate participants'
perspectives, were used.

Though the roots of ethnography have been in anthropology, an
increased interest in using this approach to do research in schools
has resulted in extensive observations of the school environment. This
growing body of literature illustrates the interactive nature of learning
in schools, suggesting ways students and teachers come to understand
each other (McDermott, 1977), and concentrating on perspectives not
often considered in educational research. As Wolcott (1976) noted,

"the ethnographer's unique contribution is this commitment to understand
and convey how it is to 'walk in someone else's shoes' and to 'tell it
like it is'" (p. 25). It is a methodology particularly suited to the
study of student perceptions of achievement and ability as they relate
to experiences within school settings. Ethnography is an appropriate
methodology for examining relationships which are not explicit or when
the problem under study is in the exploratory stage, because it allows
the researcher to proceed, initially, in an unstructured or flexible
manner (Dean, Eichhorn, & Dean, 1969). "In other words, there are few,
if any preestablished categories into which original data are cast. . . .
Researchers approach reality with a perspective which will enable them
to observe relevant data" (Schaffir, Stebbins, & Turowetz, 1980, p. 6).
Ethnographic techniques encourage a process of discovery, that is, a
process of learning what is fundamental to the people under study.
Such a methodology enables the researcher to better understand the
complex meaning systems participants use to organize their behavior,
to understand themselves and others, and to make sense out of the world
in which they live (Spradley, 1980). The ethnographic perspective
stresses a commitment to holism and the accurate portrayal of events
from the point of view of the actors involved in the events (Erickson,
1984). Lutz (1981) described ethnography as

> a holistic, thick description of the interactive
> processes involving the discovery of important and
> recurring variables in the society as they relate
> to one another, under specified conditions, and
> as they affect or produce certain results and
> outcomes in the society. (p. 52)

As a methodology developed to uncover meanings, ethnography differs
from other research approaches in a number of ways. First, the

nondirective, open-ended nature of this methodology "enables the researcher to understand and capture the points of view of other people, without predetermining those points of view through prior selection of questionnaire categories or rating scale forms" (Stainback & Stainback, 1984, p. 405). Secondly, because the goal is to describe the native or insider's point of view, the nature of the relationship between the researcher and the population under study is interactive. Rather than being passive, reactive subjects, the participants become the expert informants from whom the ethnographer gathers data. "The essential core of ethnography is this concern with the meaning of actions and events to the people we seek to understand" (Spradley, 1980, p. 5). Some of these meanings are derived from explicit, verbalized cultural knowledge while others are tacit, or taken for granted by participants who may not realize the full extent of their knowledge. In this study, a cyclic process of asking questions, collecting data, and analyzing data again and again was used throughout a prolonged period of observation. This cyclic process attempts to reveal both the explicit and the tacit cultural knowledge of the participants.

The ethnographer acquires an emic understanding, that is, an understanding of the participants' points of view, through watching, talking, listening, and participating with people in their own environments (Rist, 1982). The researcher observes behavior and constructs meaning from that which is observed through the discovery of patterns or trends which emerge through prolonged exposure to the environment. These patterns form an interpretation that is a way of explaining the participants' culture, or the norms, values, and knowledge they use to understand their experiences and from which they generate behavior.

> People everywhere learn their culture by making
> inferences. We observe what people do (cultural
> behavior); we observe things people make and use
> such as clothes and tools (cultural artifacts);
> and we listen to what people say (speech messages).
> Every ethnographer employs this same process of
> inference to go beyond what is seen and heard to
> find out what people know. (Spradley, 1980, p. 10)

This concept of culture is compatible with symbolic interactionism,
a theory which posits that to understand human behavior one must dis-
cover the meanings or definitions humans assign to objects, activities,
or individuals of interest. Symbolic interactionists beginning with
G.H. Mead (1934) hypothesized that humans, because of the possession
of a self, act toward or interpret things that confront them and organize
their actions on the basis of that interpretation. This process of
self-interaction enables people to deal with the world through a
defining procedure which results in construction or generation of
action rather than a mere release of action (Blumer, 1969). Blumer
(1969) delineated three basic premises:

> 1) Human beings act toward things on the basis of
>   the meanings that the things have for them.
> 2) The meanings of such things are derived from, or
>   arise out of, the social interaction that one
>   has with one's fellows.
> 3) These meanings are handled in, and modified
>   through, an interpretative process. (p. 2)

The theoretical orientation of symbolic interactionism provides
a framework for the social-interactive perspective taken in this study
of gifted adolescent females' self-perceptions of ability. This
perspective is illustrated most clearly by Mead's Triadic matrix
(Mead, 1934, p. 76) which emphasizes that individuals construct and
share meanings through interpretation and interaction. Ethnography

holds that humans are interpreting, defining creatures "whose behavior can only be understood by having the researcher enter into the defining process through such methods as participant-observation" (Bodgan & Biklen, 1982, p. 76). Spradley (1980) suggested that we think of these shared meanings, or culture, as a cognitive map and ethnography as the methodology designed for its investigation.

The Setting

Selection of the Research Site

The study was conducted in one middle school located in a rural area in the Southeast. The population under study, ten identified gifted girls in grades six through eight, belonged to two of the school's three interdisciplinary teams. Observations were therefore conducted predominantly in two team areas, the gifted resource room, and other areas of the school environment in which the girls interacted.

The criteria for school selection were as follows: (a) the recognition of its exemplary status by experts in the field of middle school education; (b) a population of ten gifted girls in grades six through eight which was within reasonable bounds for regular and pro-longed observation of the total population; (c) an open-space environment which enabled the researcher to move about and interact freely without disturbing the scene, maximizing the amount of classroom observation time; (d) the enthusiastic acceptance of the study by teachers, parents, and the students involved; and (e) the researcher's expertise in the area of middle school education. According to

Wolcott (1976), "Ethnography is best served when the researcher feels free to 'muddle about' in the field setting and to pursue hunches or to address himself to problems that he deems interesting and worthy of sustained attention" (p. 25). The selection of this site met this criterion.

Gaining Entry to the Site

Lofland (1971) noted that it is easier to gain access to information when the researcher has established grounds for a trusting relationship before the project is initiated. Prior to the selection of the site, the researcher had met informally and discussed the aims of the study with the team leaders while attending a professional conference on middle schools. Sharing a common status as educators interested in adolescents defused potential concern about the study. The team leaders' interest encouraged the researcher to take the next step. Project goals were explained to the county supervisor for gifted students, and, subsequently, a meeting was arranged in late November to include the school's gifted resource teacher, the supervisor, and the researcher. Believing that the majority of the gifted girls were not achieving in accordance with their potential, the resource teacher, Mrs. Johnson,[1] noted that the study might increase classroom teachers' understanding of gifted students' particular problems. Establishing the team leaders' and Mrs. Johnson's interest in the study provided

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[1]This name and all names used in this study are pseudonyms.

the basis for a trusting relationship with the researcher and paved the way for the formal attempt to gain entry to the site.

Next, a meeting was held with the school principal to discuss the project and obtain his permission to propose the study to the ten girls. On that same morning the researcher met with the students in a conference area located near the gifted resource room to explain the study and distribute permission slips. The letter of permission is included in Appendix A.

According to Cassell (1978), a skilled ethnographer once informed her that casting oneself in the role of learner was the secret of successful fieldwork. If the goal is to understand students' perceptions of school experiences it is important for the students to perceive the researcher as an eager learner in search of good teaching. With this rationale in mind, the researcher used the occasion of the first meeting to immediately begin taking field notes of the girls' reactions to the study. In addition to establishing her position as a learner, the researcher believed this behavior would serve to illustrate the type of methodology which would be used and to establish the stance that, during this study, "nothing is off the record" (Cassell, 1978, p. 37). The researcher also believed this initial behavior with the girls was essential (a) to indicate to the students that she cared about what they were saying and was therefore writing it down; (b) to establish the pattern of continuous documentation; and (c) to allow the girls to express curiosity, question, and become comfortable with this method of data gathering prior to its use in a classroom situation.

All of the girls attended this informal meeting. Sitting in a circle around the conference table they listened to the researcher present the study.

> Observer: I want to write a book about what school is really like, but I want to describe school through the eyes of gifted girls. This might be hard to do because it means I'll have to hang around a lot and ask a lot of questions. I really want to know what things are like here, but I'll need your help to understand them. I wanted to ask you if you were interested in helping.

The sixth and seventh grade girls were quickest to express interest in the idea, asking if their names would be used, if their parents would be told, and if their teachers and classmates could know about the research. The five eighth grade girls were stand-offish at first. Three of these girls sat close together in a group apart from the other two and conferred quietly while the observer pointed out that the quality of the research would hinge on accuracy and careful attention to factual detail, but that chief among the researcher's responsibilities was the preservation of anonymity (Kottak, 1979, p. 336). As if making the decision for her friends, Connie, one of the three eighth graders who had not yet joined the discussion, announced, "We are definitely doing this! It sounds neat!"

This initial meeting, held three weeks prior to Christmas break, culminated in the distribution of permission forms. Several of the girls suggested the researcher collect the permission forms and individual class schedules from the resource teacher. The researcher, encouraging their roles as key informants, agreed with their plan, and a date was suggested to collect the forms and make preliminary visits to the team areas before the holidays. As they exited, one girl

responded to the observer's concern about explaining the study to other students by laughing and shrugging her shoulders. "Forget it. You don't know people here."

The following week the researcher attended a holiday party held after a brief faculty meeting, met the teachers of both teams, and scheduled a time to visit team meetings to explain the goals of the study and the nature of qualitative research. As in the first meeting with students, the researcher appeared at both team meetings with notebooks, pencils, and a taperecorder and wrote field notes while discussing the study. Team One's meeting was held at lunch, was informal in nature, and did not produce any questions or concerns about the research. The teachers indicated students were used to visitors due to the school's status as an excellent middle school, and that no one would notice the researcher's presence. In contrast, Team Two's meeting was held after school and included an agenda of formal business upon which the teachers kept themselves focused and on task. After a brief discussion of the study, the team leader indicated to the researcher that it would not take long before students and teachers would consider her "a member of the family" (team).

While obtaining the consent of students, teachers, parents, and administrators at the school, an application to conduct research in the public schools was submitted to the school district office and a description of the proposed project to the University's Committee for the Protection of Human Subjects. By the beginning of January the project was approved.

In discussing the issue of gaining entry, Bogdan and Taylor (1975) suggested the importance of keeping detailed field notes during this stage as a way of gaining insight into how organizations socialize outsiders. "Gaining entry, and the conditions under which it is established, is one of the most critical phases of qualitative research" (Rist, 1982, p. 442).

Description of the Site

The study was conducted in a public middle school in a rural area in the Southeast. The school's 442-member population was housed in a modern, open-space building. The school, itself, was described by the town's Chamber of Commerce as one of the finest in the United States.

According to the residents of the area, the community's rural lifestyle was one of unequaled quality, characterized by warm friendships and a close-knit community. This description was made clear to the researcher on three separate occasions, the first of which occurred early in the data collection when the researcher had the opportunity to conduct an informal interview with a substitute who was temporarily replacing the gifted resource teacher, Mrs. Johnson. During the interview the substitute teacher, who had grown up and gone to school in the community, described her perceptions and what she termed the community's perceptions of several of the gifted girls. She indicated that in such a small community most people knew something about their neighbors, especially if they had lived in the community for awhile or attended the same church. On a second occasion, the researcher accompanied the seventh grade gifted class on a field trip to the

local Chamber of Commerce. Because of the school's close location the
trip was conducted on foot. The students used this opportunity to
provide the researcher with unsolicited data about the neighborhood
and its residents, and their own family histories. The extent of their
knowledge about the community and its citizens was considerable,
especially when contrasted with the comments of Nancy, a gifted seventh
grade girl who had just moved into the rural community from a city, and
was having difficulty being accepted. In addition, while walking
through the downtown area, the close-knit feeling of the community
was made apparent when several local merchants and passers-by waved
greetings to the students. Thirdly, once inside the Chamber building,
the students and Mrs. Johnson pointed out a pictorial display of the
community's past mayors, indicating their current roles in the community.
The researcher noted that the principal of the middle school who had
served since its opening had also recently served as the town's mayor.

The school's student body was 47% male and 53% female, including
a black population of 22%. Slightly less than half of the students
were bussed to and from the school. The percentage of students in
various Exceptional Student Education programs was 17, of which
approximately   7%   were classified as gifted. Of the 29
gifted students in grades six through eight, ten were female.

The physical layout of the school was very modern. In the center
a large open-pit area served as the library and media-center and
included several enclosed conference rooms. Located nearby were the
central office, teacher's lounge, the home economics room, and a science
lab. To the right of the library pit were three large instructional
areas which comprised the school's three teams.
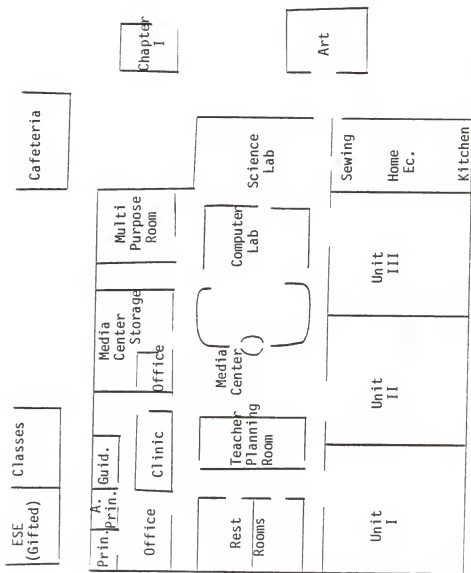
Figure 1. School Map

Each team area was a large open space housing heterogeneously grouped students in two grade levels: team one, seventh and eighth graders; team two, sixth and seventh graders; and team three, fifth and sixth graders. While originally this organization of students had reflected developmental grouping based on social-emotional as well as academic factors, the majority of teachers indicated that this was no longer true. Now students were placed in teams depending on their curriculum needs. For example, Team One offered pre-algebra to its seventh graders whereas Team Two did not. For this reason Mr. Lakeman, team leader for Team Two, had described his team as being a "dumping ground" in the past because the more academically able seventh graders were placed on Team One. To counteract this problem, he had recently begun to make yearly lists of sixth graders who voluntarily signed up to remain in Team Two a second year. All students would spend two years on one team if they entered the school as fifth graders and stayed through the completion of eighth grade.

Observations conducted at the school centered on Teams One and Two because none of the studied population were members of Team Three. Although both of these teams were divided into four equal classrooms, one for each of the four core teachers, the physical use of space within the teams was distinctly different. Team Two organized large book shelves, moveable chalkboards, and tables to separate the class-rooms into separate spaces, thereby reducing the noise level and forcing the students to walk in narrow pathways when exiting and entering the individual classrooms. Team One did not use furniture to create an atmosphere of separate classrooms, and the noise level and random

movement throughout the team area were correspondingly high. Wall space was not utilized in Team One to display student work or announce team activities to the extent that it was in Team Two. While teachers on both teams attributed these physical differences to the age level of students and the individual personalities of teachers on the team, the principal attributed them to different philosophies which had developed within the teams themselves.

While examination of student schedules suggested that the organizational features of an exemplary middle school were in effect, prolonged observations pointed out that some of these features were stronger than others. For example, an advisor-advisee program, multiage grouping, and interdisciplinary teams had been built into the school at its inception and were based on the middle school philosophy that organization of this nature would encourage the development of a community of learners. "A student knows that s(he) is a member of a specific team, and even a specific advisory group; that these structures have dimensions that early adolescents can manage" (Alexander & George, 1981, p. 134). Repeated observations at the site, however, revealed that while interdisciplinary teams were a strong organizational characteristic of the school, the use of advisor-advisee time and multiage grouping had greatly changed since the school's inception. At the time the study was conducted, the time allotted to advisor-advisee programs had been shortened to 15 minutes and was rarely used; multiage grouping existed only in that teams contained students in two grade levels. Strict curriculum guidelines handed down by the county had resulted in only a few math and language arts classes which could be multiage-grouped.

Additional scheduling problems had also discouraged the use of multi-age grouping in exploratory classes, physical education, and resource classes such as gifted. The decreased emphasis at the school level on multiage grouping and advisor-advisee programs was mirrored in comments made by the girls throughout the study.

> Cindy: This year 15 minutes for AA (advisor-advisee) is not long enough to do a project, and it's too long to get your pencils and paper so unless you want to be a social butterfly, it's wasted. Usually I don't have anything to do. Some teachers will plan something but most don't. . . . But even if we could have a longer AA, I'd rather have a longer lunch.

> Sally: The seventh and eighth graders on our team are separated all the time. Last year we had some classes together. . . . Well . . . it's like we don't even hang around together. We (eighth graders) have our own feelings and all, and they don't understand yet.

The gifted program in operation had also changed greatly during the school's history due to a shifting emphasis at the county level. No set county curriculum existed for middle school gifted programs other than the adoption of five major goals including the development of (a) higher levels of thinking, (b) self-directed learning, (c) positive attitudes of self-worth, (d) interpersonal relationship skills and leadership techniques, and (e) creative thinking. Mrs. Johnson informed the researcher that the major difference between her program and those found at other county middle schools was that students were staffed into the gifted room one entire day per week rather than one period per day.

The population under study consisted of three sixth, two seventh, and five eighth graders, including one black student. The girls were

identified for the program using the state criteria of a 130 I.Q. score and represented a range of I.Q. scores from 131-140. Eight of the girls had spent the majority of their school experience at the elementary and now the middle school in the same rural community, and seven of these had entered the gifted program during or before the third grade. At the time the study took place, the state policy did not require periodic retesting to remain in the program. Two of the girls, including one who was new to the school, had spent the majority of their past school experiences in private settings. With the exception of one student, all came from two parent homes in which the majority of mothers had equal or more formal education than the fathers, though in traditional fields such as teaching, nursing, or library science. The majority of mothers did not work full time.

Research Methods and Procedures

Asking Ethnographic Questions

Spradley's (1980) Developmental Research Model is cyclic in nature, in contrast to quantitative research models which proceed in a linear fashion from the statement of a hypothesis to the collection and analysis of data, to the research conclusion. In doing ethnography, "the fieldworker generates a situation-based inquiry process, learning, through time, to ask questions of the field setting in such a way that the setting, by its answers, teaches the next situationally appropriate questions to ask" (Erickson, 1984, p. 51). This questioning process is a critical aspect of the research cycle because the questions asked

direct data collection and lead the researcher closer to the emic knowledge (personal perspectives) of the people being studied.

Ethnographic research begins without a precise hypothesis which may "close off prematurely the process of discovery of that which is significant in the setting" (Wilcox, 1982, p. 459). Rather, the researcher begins with foreshadowed problems to direct and focus the study. Malinowski (1922) noted that foreshadowed problems are "the main endowment of a scientific thinker and these problems are first revealed to the observer by his theoretical studies" (p. 9). In this study two broad general questions were posed to serve as a framework for the study: What kinds of experiences do gifted girls have in a middle school setting in which they are members of heterogeneous teams as well as homogeneous gifted classes? How do they use these experiences to construct their own behavior and self-perceptions? In order to provide some focus for the initial observations and interviews, the following list of foreshadowed problems was posed.

1. How do gifted girls define achievement?

2. How do gifted girls' self-perceptions of ability differ from their perceptions of peers' abilities?

3. How do gifted girls behave in academic and nonacademic situations in regard to (a) task commitment, (b) risk-taking, (c) leadership, and (d) creativity?

4. How do team organization, participation in a gifted program which entails removal from the team one day per week, and peer influences affect gifted girls' experiences in school and their perceptions of experiences?

Ethnographic questions are the main tools for discovering cultural knowledge (Spradley, 1979). As the study progressed, descriptive, structural, and contrast questions were asked. Each kind of question directed observations and interviews in different ways and provided for different levels of data analysis.

Descriptive questions were asked during the early stage of observations, to collect samples of language and aid the researcher in becoming familiar with the social scene. These general questions included "What happens in the gifted resource room?" "What seating patterns exist in classrooms?" and "How do gifted girls spend their classroom time?"

Following initial data analysis, structural questions were asked to add depth to the researcher's knowledge of the social scene. For example, an early observation was that different groups of the girls tended to have different territories before and after school. Structural questions posed were "What activities are students in the different territories engaged in?" and "Do student behaviors change if students change territories?" These structural questions were asked repeatedly and led to more narrowly focused observations.

Finally, contrast questions were asked to identify differences between elements in a category. For example, in the category Things I Worry About were elements such as being popular, physical appearance, and making good grades. To ensure that these were distinct elements in the category the researcher asked the contrast question, "How are these problems different?" The question led the researcher to review

field notes and interviews and to conduct additional observations to
find the differences.

Collecting Ethnographic Data

The researcher's objective was to discover and describe the experi-
ences that adolescent girls labeled as gifted have within a middle school
setting and to construct, from those experiences and the students'
perceptions of them, ways the girls defined their own abilities and
achievements. Since these definitions were aspects of the girls'
cultural knowledge that could not be directly observed, the researcher
used three types of information to make cultural inferences. The types
of information used were the girls' behavior in class as well as before
and after school, the things they produced in school including the tools
they used to do so, and their speech messages (Spradley, 1980).
Gathering evidence of this nature enabled the researcher to uncover
the fundamental assumptions about personal abilities and achievements
that were taken for granted by the girls.

Three main methods were used to collect data. Spindler (1982)
observed the need for a variety of methods to uncover the participants'
view of reality, noting that whenever possible technical devices should
be used to collect live data. Other qualitative researchers such as
Wolcott (1976), Pelto and Pelto (1978), and Denzen (1978) have asserted
that using multiple methods to gather data increases the credibility
of the study. They note that data obtained using different methods
can be compared through triangulation, thus allowing the researcher

to strengthen the validity of constructs and rise above any weakness
that might result from using only one method. In this study, participant
observation, interviewing, and unobtrusive measures were used to collect
data. A tape recorder was used to record interviews and some gifted
classes. These methods will be described, and problems inherent in
their use discussed.

Participant observation

Participant observation is the primary tool used in gathering data
for a qualitative study (Spradley, 1980). As Blumer (1969) described
the researcher's role within a given setting, this method requires

> getting close to the people involved in it, seeing
> it in a variety of situations they meet, noting
> their problems and observing how they handle them,
> being party to their conversations and watching
> their way of life as it flows along. (p. 37)

In this study, the researcher observed 200 hours of classroom
activity over a five-month period from January to early June of 1984.
Observations were conducted three days a week, usually on Mondays,
Wednesdays, and Fridays. The first and third weeks of observations
were conducted only in the gifted room so that a smaller student
population (classes usually did not exceed ten) would enable the
researcher to develop rapport with the participants at a faster pace.
The second and fourth weeks consisted of descriptive observations in
both teams. From the fifth week on the researcher spent three weeks
following the girls in each grade level, one week in the gifted room,
an additional week at each grade level, and a final week in general

observations. The teachers were offered a schedule of observations, but did not indicate an interest in one.

Successful participant observation requires time to sample the range of experiences and situations the participants encounter. Participant observation requires the development of an acceptable role for the researcher. This role should encourage the growth of trust and rapport. This presents a particular problem for researchers in schools where no formal role exists which will allow participation (Wolcott, 1976). While ethnographers, depending on the requirements of the setting, have assumed roles anywhere along the continuum from passive to active participant, Schwartz and Schwartz (1969) noted that the more active observer "increased his identification with the observed and was better able to become aware of the subtleties of communication and interaction" (p. 98). The decision made regarding the amount of participation the researcher will undertake evolves not only from the structure of the particular school or classroom, but also from the perceptions the participants form regarding the researcher. "In every case the field worker is fitted into a plausible role by the population he is studying and within a context meaningful to them" (Vidich, 1969, p. 81). The result is that the researcher's role, a product of his or her own intentions and the perceptions of participants, determines what the researcher will see. This, in turn, influences the value of the items of evidence produced by the study. "For the way the subjects of his study define that role affects what they will tell him or let him see" (Becker, 1969, p. 250).

The researcher introduced herself to the participants as a graduate student who was interested in women's studies. The girls were told that the researcher wanted to write a book about gifted girls' experiences in school, and that their help would be needed to produce a factual account. In assuming a role of one who needed to be taught, the researcher stressed the idea that she "would not be offended by being told 'obvious' things and being 'lectured to'" (Lofland, 1971, p. 99).

During the course of the study the researcher took great care

> not to have the manner or appearance of any group
> which his informant group distinguishes sharply
> from itself. This does not mean forcing identity
> with the informant group; it does mean that the
> observer of students, if he wishes a good under-
> standing with them, will avoid the manner of
> teacher and authoritative adult. (Geer, 1969,
> p. 147)

For this reason, once the researcher had gained entry, interactions between the researcher and teachers were limited to formal interviews, attendance at two team meetings and a faculty meeting, and occasional informal conversation initiated by the researcher to verify observa- tions. The researcher took care to wear attire such as jeans and tennis shoes which was more acceptable to the student culture, to use student language, to "hang around" with student groups before and after school, and to eat lunch in the student cafeteria. During classroom observa- tions the researcher sat with students, the majority of the time beside one or several of the girls. When leaving classrooms or going to lunch required lining up, the researcher lined up with students. At all times the researcher subjected herself to the same rules set up for students, though on occasion this caused discomfort for teachers. For instance, when leaving the book fair required that students be

searched, the researcher lined up to be searched. The librarian laughed
and refused to do so.

The extent to which the researcher came to be identified with the
girls was considerable. On numerous occasions, teachers would comment
to the researcher that they had not noticed her presence in class until
the end of the period. Several times the researcher was stopped from
entering the building before school by the janitor who assumed she was
a student. On one occasion, after telling her class that she wanted
"All eyes up front," a sixth grade teacher turned to the researcher and
laughed, "No! No! Not you!"

Other student members in both teams under observation showed some
curiosity about the researcher, but as Cassell (1978) noted, participant
observers who hang around more and interact with students find their
visibility decreases with time. Many students, both boys and girls,
sought out the researcher to talk about school. This was especially
true of the different peer groups that each girl associated with.
During the course of the study, several girls who were friends of the
participants came to confide in the researcher, invite her to after
school clubs, and sit with her at lunch. Several informal interviews
were conducted with these girls, many of whom had previously been
tested for admission into the gifted program.

Strauss et al. (1969) commented that the "fieldworker's identity
shifts when he spends an expanded period of time interacting with the
same people" (p. 70). During the early stages of data collection
several girls quite naturally became "key informants" (Spradley, 1980),
seeking out the researcher during free time, sitting with her in class

or at lunch, and initiating conversations. The researcher reacted by concentrating her observations on these girls, using them as focal students. Cassell (1978) suggested this strategy helps to reduce bias, control the observer's tendency to find what he or she is looking for, and to make sure that the observer was not attracted to just observing interesting things. The kinds of girls who were initially attracted to the researcher were considered significant data and were carefully documented in the researcher's journal.

As the study progressed the researcher was able to establish excellent rapport with each girl, though the process took much longer with Connie and Debbie, two eighth graders who were members of the most popular girls' clique. The nature of the difficulty became clear during a formal interview with Connie which occurred in April.

> Connie: People are totally different away from
> school. I show a lot of this [behave this way].
> What I'm telling you now is what I can say when
> I'm away from school. Then there's not pressure
> to be cool. . . . I thought it would be hard to
> talk to you because you're older, but it's not.
> I was worried. I guess the clique teaches you to
> watch out what you say and who you talk to.

The girls initially displayed curiosity in the fieldworker's notes and would often drift over and read them as she wrote. The researcher maintained the openness of notes written during observations throughout the study as a rapport building device. The girls knew that observation notes were not shared with teachers, parents, or other students and came to trust her with confidences. On several occasions the researcher's policy of open-notes led to expanded and clarified accounts of classroom interaction as the girls filled in details for the researcher. This policy proved a valuable way to triangulate data.

The girls did not ask to read field notes from formal interviews, and, as the study neared completion, showed less interest in notes taken during observation periods.

Interviewing

Three types of interviews were utilized in this study: formal, informal, and structured. Formal interviews were conducted at the request of the researcher with all teachers in both teams, the principal, all ten girls, and the mothers of five of the girls. These interviews included several core or guide questions whose object was to

> elicit from the interviewee what he considers to
> be important questions relative to a given topic
> . . . to find out what kinds of things are happening,
> rather than to determine the frequency of predeter-
> mined kinds of things that the researcher already
> believes can happen. (Lofland, 1971, p. 76)

During these interviews the researcher took care to make repeated explanations, restate what informants had said, and to phrase questions in terms of use rather than meaning (Spradley, 1979). For example, questions such as "How do you get in with the popular crowd?" proved more helpful than "What does it mean to be popular?" Interviews of individual girls, the teachers, and mothers generally took place by grade level during the three week period of concentrated observation at that level. Core questions for formal interviews are included in Appendices B, C, D, E, and F.

Formal interviews were also held with groups of girls by grade level. Though the researcher would have preferred to have multiage groups during these interviews, different schedules and requests by

the participants made this impossible. In particular, the eighth grade girls did not wish to meet with the sixth or seventh graders. These group interviews gave the girls time to reflect, to remember specific incidents, and to verify or contradict each other's statements. Group interviews were held during the first four weeks of the study.

As a part of the formal interview conducted with individual students the researcher asked several structured questions requiring students to select an answer on a scale from "not at all" to "all the time" (Whitmore, 1980, Appendix L). In most cases, the researcher found students' responses to these items to be very confusing and probed for explanations. For example, when given the item, "I look forward to going to school," the girls, without exception, selected "all the time." Because the researcher's observations revealed the girls to be inattentive frequently during class, the researcher expressed her confusion. In clarifying their answers, the girls explained that school was exciting because it was a place to meet friends. An additional example which proved insightful to the researcher was the item, "My teachers listen carefully to my ideas." Sally, an eighth grader who was observed to rarely volunteer ideas, selected "all the time." When probed to explain her choice, she informed the researcher that teachers listened to her precisely because she never spoke out. The use of such forced-choice items proved insightful only when additional questioning was used to reveal the girls' perceptions of the statements themselves. The differences between the girls' definitions of the statements and the researcher's definitions were considered valuable data.

Informal interviewing occurred frequently and was a method of verifying observations. Ample opportunities for informal interviews were provided by hanging around before or after school, eating lunch with students, or during class itself. While the researcher refrained from talking to students during class, in moments before or after instruction students often initiated conversation with the researcher. The researcher also informally interviewed several gifted boys and several of the girls' female friends.

Constant comparison of observations and interviews enabled the researcher to assess the validity of comments made by participants (Becker, 1969). The researcher found, for example, that the girls' positions in the school's social hierarchy affected their perceptions and descriptions of events. The girls who were able to describe the school's cliques most vividly, including clique membership, were those girls occupying a middle status. Gifted girls who were members of the upper clique were least likely to talk about this membership, while gifted girls who were social isolates verbally denied the existence of cliques or misrepresented their position in them.

Unobtrusive measures

Unobtrusive measures are those measures which do not require interaction between the researcher and the setting under study, thus minimizing the possibility that the observer's presence "may change the very world being examined" (Schwartz & Jacobs, 1979, p. 75). In this study the researcher reviewed the girls' cumulative records,

report cards, and random assignments completed in class. It was thought
that these data would be helpful in characterizing teachers' expecta-
tions and in clarifying the girls' perceptions of their achievement.
Personal journals kept by each girl as a part of the gifted curriculum
were examined along with journals kept by three of the eighth grade
girls for their advisor-advisee class. Written materials provided by
the school for its five year review were also examined. Lightfoot
(1983) stated these documents can give the researcher a sense of how
the school wished to be perceived.

While using a variety of methods to collect data increases the
credibility of a study, there are problems inherent in participant
observation which must be addressed in assessing the quality of the
study. McCall and Simmons (1969) described three categories of problems:
"(1) reactive effects of the phenomena being studied; (2) distorting
effects of selective perception and interpretation on the observer's
part; and (3) limitations on the observer's ability to witness all
relevant aspects of the phenomena in question" (p. 78). The following
steps were taken by the researcher to minimize these problems. The
researcher selected a site in which teachers and students were used
to and comfortable with a variety of visitors. The physical openness
of the school made it easy for the observer to move about without
attracting attention. The policy of the researcher to associate her-
self with the students and to allow the girls to look at field notes
written in classrooms encouraged the girls to behave as they normally
would if no researcher were present. The girls' tendency to pass notes
in front of the researcher and, on one occasion to bring alcohol to

school, are indications that they did. The lengthy period spent collecting data, the researcher's journal, and the variety of methods used to collect data helped the researcher overcome distorting effects of selective perceptions. Finally, using unobtrusive sources of data helped the researcher overcome her inability to witness all relevant aspects of an event.

Making an Ethnographic Record

Data collected in this study were recorded in the form of field notes, interviews, and a research journal. The major portion of the data was recorded in written form while activities were actually occurring. All formal interviews and several gifted classes were recorded on tape as well and transcribed by the researcher.

Field notes written during observations were recorded in as much detail as possible. These field notes, written at the site, represented what Spradley (1980) called a condensed account of what had occurred. Typically the researcher's notes reflected phrases, partial drawings, or unconnected sentences. As soon as possible after observation periods, for instance, when classes changed or activities within the same class changed, the researcher expanded these notes by filling in details. Frequently the researcher left the classroom scene and created an expanded account while sitting in the library pit. The researcher did not leave the school site without rereading and filling in the day's observations. Expanded accounts were typed into formal protocols by the researcher.

Lofland (1971) stressed the need to take notes at the lowest level of inference, that is, to be concrete and behavioristic when in the field. In an effort to get at concrete descriptions the use of verbatim language was especially important to the researcher. Every attempt was made to quote the subjects directly, and symbols were used in field notes to indicate when the language used was not verbatim, but represented the researcher's summary or paraphrasing. Also included in the field notes were brief descriptions of the researcher's reactions to events as they happened or questions which occurred to the researcher during observation periods. These were separated by brackets from the rest of the field notes.

Other data recorded in the field notes were descriptions of entries the girls had made in journals they kept for their gifted class, direct examples of poetry or prose they had written, and information gleaned from school records. Diagrams were included periodically when the physical arrangement of a room changed or when seating arrangements within a class changed. Other diagrams recorded by the researcher were chalkboard work, visual displays, and social notes written by the girls during class. These social notes were included in the researcher's field notes only when the student voluntarily shared the note or when, in three instances, the student actually wrote the note and passed it to the researcher during class.

Formal interviews with groups of girls, individual girls, teachers, and parents were recorded on tape, transcribed, and filed separately from field notes. While recording these interviews the researcher took written notes so that gestures, facial expressions, and posture would be included in the expanded account.

A research journal was kept which reflected the researcher's experiences from the initial stages of gaining entry through the final day of observation. As a record of the ethnographer's experiences in the field, the journal provided a tool for reflection on concerns, insights, and problems which occurred (Spradley, 1980). Entries in the journal were typically written after the researcher had mused over several sets of protocols. The journal was most valuable in that it enabled the researcher to monitor her changing role in the social scene, providing a record of her attitudes and biases that were later examined during data analysis. These issues are discussed in the final sections of this chapter.

Analyzing Ethnographic Data

Ethnography is "a naturalistic, observational, descriptive, contextual, open-ended, and in-depth approach to doing research" (Wilcox, 1982, p. 462). As such, researchers use a variety of methods and techniques to gather and analyze data. In qualitative research, the analyst's aim is to provide an explicit account of the structure, order, and patterns found among participants in the social setting under study (Lofland, 1971).

In doing ethnography, a certain amount of analysis is required while the researcher remains in the field. This stage of analysis is extremely important in that it serves to guide the study, continually narrowing the focus to fundamental issues heuristic to the setting. Analysis as an ongoing part of this study was previously discussed in

the section on asking ethnographic questions. In summary, after examin-
ing initial data, the researcher asked descriptive, structural, and
contrast questions. These questions served to guide subsequent data
collection sessions. This cycle of questioning, collecting, and
analyzing was repeated throughout the duration of the study.

Data collected from participant observation, interviews, and
unobtrusive measures were analyzed using Spradley's (1980) four-step
method. The stages of data analysis are described below:

1. Domain analysis was begun with the first set of protocols.
In this phase of analysis the researcher looked for patterns or cate-
gories of meaning, what Spradley called domains. These categories were
discovered through continuous reading of protocols with specific
questions in mind. Spradley described nine semantic relationships
that could be used to question the data and uncover relevant domains.
The most helpful semantic relationships were strict inclusion (X is a
kind of Y), cause-effect (X is a result of Y), rationale (X is a reason
for doing Y), means-end (X is a way to do Y), and attribution (X is a
characteristic of Y). This task of "delineating forms, kinds, and
types of social phenomena; of documenting in loving detail the things
that exist" (Lofland, 1971, p. 13), continued throughout the study.
The linguistics used by the participants themselves were utilized as
included terms within domains as often as possible.

2. Taxonomic analysis, uncovering the organization of domains
themselves, was the second phase of analysis. A taxonomy reveals
relationships among the terms inside the domain, uncovering subsets
and the ways individual terms are related to the whole. Taxonomic

analysis also helps the researcher to relate domains to one another. One taxonomy, Kinds of Ability Perceptions, became the framework for the findings of the study.

3. Componential analysis is a search for attributes of domains and their included terms. For example, in conducting a componential analysis the researcher looks for characteristics of the acts, activities, relationships, setting, and participation, and the variations they display. The goal is to determine if the domains and terms within them are distinct elements in the social setting.

4. Theme analysis, the final stage of the four step model, involved looking for meanings which were recurrent in domains and which illustrated a relationship within taxonomies. Although a theme may not unite all domains, it should make sense of the whole and thereby have a high degree of generality. In this study the theme was revealed through a recurrent set of questions which clarified the organization within domains and across taxonomies. These questions were "What is problematic to the participants?" "What things cause them concern, irritation, or happiness?" "When they think about their roles in school, what appears to them as stressful, important, or difficult?"

In a discussion on gathering and analyzing ethnographic data, Lightfoot (1983) characterized the doing of ethnography as similar to the painting of a portrait:

> Portraiture is a genre whose methods are shaped
> by empirical and aesthetic dimensions, whose
> descriptions are often penetrating and personal,
> whose goals include generous and tough scrutiny.
> It is a sensitive kind of work that requires the
> perceptivity and skill of a practiced observer
> and the empathy and care of a clinician. (p. 369)

Implied in her discussion are two important issues which will be discussed in the final sections of this chapter: (a) researcher qualifications and biases and (b) validity of the findings.

Researcher Qualifications and Biases

The ethnographer is the key research instrument. For this reason a discussion of the researcher's qualifications and biases is essential in judging the quality of the research effort. "One's frame of reference, in part a product of one's professional training, influences the selections one makes from the phenomenon and determines how and what is observed" (Schwartz & Schwartz, 1969, p. 102).

The researcher's qualifications and professional training are listed below:

1. The researcher had eight years of professional teaching experience, including extensive work with gifted children in a regular classroom setting and one year as a teacher of the gifted in a university laboratory school. Five of the eight years of experience were at the middle level.

2. The researcher has completed coursework for a Ph.D. in curriculum and instruction, specializing in middle school and gifted education. The researcher is certified by the state of Florida as a teacher in both areas.

3. The researcher has taken four courses which provided a theoretical and practical background in qualitative research and has read extensively in this area.

4. The researcher has completed an ethnographic study of gifted adolescent females involved in a career awareness seminar. Based on this study two articles have been accepted for publication and one regional research presentation was made.

5. The researcher has presented workshops and in-service presentations for classroom teachers working with gifted students, has worked as a consultant for district middle schools, and has made a presentation at the National Association for Gifted Children.

In addition to examining the researcher's qualifications, both in regards to her ability to conduct qualitative research and in terms of the researcher's frame of reference, it is important for the researcher to make clear any underlying assumptions or biases which may have resulted in a selective perception of data. "The researcher can and does know what his biases are, and . . . knowing what they are, he can, by specifying them, prevent distortion of his observations" (Schwartz & Schwartz, 1969, p. 103). The researcher's journal enabled her to actively look for personal biases and explore their consequences. The following list demonstrates the researcher's awareness and provides the reader with a framework for evaluating the study (Ross, 1978).

1. The researcher believes that gifted students require an enriched curriculum through special programs which stress critical thinking, problem solving, leadership, and creativity. Related to this is the researcher's concern that practice in these skills is not being adequately provided for all students in regular classroom settings.

2. The researcher is especially concerned about the kinds of social and academic experiences encountered by gifted adolescent girls

in public school settings and their tendency toward underachievement as revealed by previous research.

3. The researcher holds a social-interactionist perspective; that is, that human perceptions are influenced by contextual settings and that those settings, in turn, are influenced by human perceptions.

4. The researcher assumes that gifted adolescent girls' perceptions of school experiences and their own abilities and achievements may not be congruent with the perceptions of others within the school.

Validity and Ethical Issues

The degree to which scientific observations record or measure that which they purport to measure determines the validity of the study (Pelto & Pelto, 1978). This is a central issue in ethnography where the match between the research model and the world under study is its major strength (Lecompte & Goetz, 1982). In their discussion of criteria which can be used to appraise the validity of qualitative studies, Ross and Kyle (1982) have suggested the following questions as guides for both researchers and consumers of research.

1. Is the problem studied significant, and is there sufficient depth to the study?
2. Does the author refer to appropriate theory and research?
3. Does the researcher provide a comprehensive description of the methodology?
4. Does the researcher explore alternative explanations?
5. Does the researcher support interpretations and explanations with multiple evidence?
6. Is the study well-written and organized?
(pp. 9-10)

In asking these questions the researcher acknowledges their importance in determining the quality of the study.

The steps taken to ensure the validity of this study's findings included the following:

1. The lengthy period of data collection ensured the researcher's familiarity with the social setting and provided ample opportunity for continual data analysis to refine domains and taxonomies and to ensure the match between these categories and the setting.

2. Formal and informal interviewing of the girls, their parents, and teachers, and the use of unobtrusive measures enabled the researcher to get at emic perspectives and to triangulate data obtained through observations.

3. The search for negative examples enabled the researcher to refine constructs.

4. The acceptance of the researcher by the participants allowed the researcher to achieve a significant level of participation.

5. The practice of keeping open field notes, or allowing the girls to read and comment on field notes taken during classes, enabled the researcher to clarify, enlarge, and validate observations. This practice also contributed to the rapport which developed between the researcher and subjects.

Yet another procedure for establishing the validity of the researcher's findings was to discuss them with some of the participants. In early December, 1984, one year following the onset of data collection, the researcher returned to the school to discuss the findings of the study with participants. By sharing findings with the teachers and some of the girls who had been involved in the study, the researcher received important feedback on her interpretations of participants' perspectives.

In considering the ethical issues involved in fieldwork, Schaffir, Stebbins, and Turowetz (1980) noted that, "the oft discussed questions of what to write about the group one has studied, how to protect confidentiality against legal proceedings, and the like are of greatest concern after leaving the field" (p. 15). The researcher has, during the writing of this study, attended to the facts and reported the findings while making every effort to protect the identity of the school, the teachers, and the girls themselves. For this reason, descriptive facts which did not affect the findings of this study have been changed or omitted. The researcher further notes that, during the data collection period, participants were continually reminded of the researcher's interests and were not misled or recorded without their knowledge. Upon completion, a final copy of this research will be made available to county personnel, as well as the school's administration, teachers, and gifted girls.

In the next chapter the researcher's findings are described and discussed. In the final chapter, implications of the present study are discussed.

CHAPTER IV

GIFTED ADOLESCENT GIRLS' SELF-PERCEPTIONS OF ABILITY

The goal of this study was to uncover the self-perceptions of
ability held by gifted females attending a middle school in which they
were members of interdisciplinary teams and a pull-out gifted program.
As previously discussed, this research was based on a social-
interactionist perspective, and thus on the assumption that indi-
viduals' self-perceptions of ability are constructed through their
interactions in social settings.

In this study the researcher focused on interactions which took
place in the gifted classroom, two of the school's three team areas,
and in the library, cafeteria, and other areas of the school environ-
ment which were regularly inhabited by the girls. Observations
centered on the girls' interactions with teachers, peers, and educa-
tional materials within and outside the classroom setting. Additionally,
both formal and informal interviews were conducted with each girl
individually and in groups throughout the study. Teachers on both
teams and five of the girls' mothers were formally interviewed.
Artifacts such as cumulative folders, personal journals kept by the
girls, report cards, and work completed for classes were examined.
These kinds of concrete phenomena were used by the researcher as indi-
cators of gifted adolescent girls' self-perceptions of ability.

Data were analyzed into domains according to Spradley's Developmental Research Sequence (Spradley, 1980). This process required that data be analyzed continuously to isolate relevant categories of language, behavior, objects, people, etc. Domains which proved to be particularly significant in uncovering gifted girls' self-perceptions of ability included Results of Being in the Gifted Program, Ways to Know You've Done Your Best, Kinds of Goals, Kinds of Status, Things That Are Important, Steps in Getting a Teacher to Like You, Attributes of Smart People, Differences Between Gifted Boys and Girls, and Responsibilities of Students on a Team. Domains were then organized into taxonomies. That is, data which indicated ways gifted girls thought about their abilities were drawn from across many domains and organized into new domains which represented factors influencing self-perceptions of ability. Taxonomies were also constructed to represent achievement-related behaviors within different contexts such as the different teams and the gifted classroom.

This analysis reflected the social-interactionist perspective which served as a theoretical framework for the findings of this study. From this perspective, individuals create meanings for people, things, and events in their world through their interactions in social contexts. The meanings, or perceptions, are not inherent in the people or events themselves, but instead are products of social interaction. These premises of symbolic interaction (Blumer, 1969; Mead, 1934) were found to be useful in understanding and describing the self-perceptions of ability held by the gifted girls studied, and the effects of the school culture (i.e., organizational features,

student-teacher relationships, and peer group influences) on their perceptions.

The student perspective which emerged from the data was based on evidence from all ten girls in the school's gifted female population, though individual aspects of the perspective were shared by the girls in varying degrees. As previously discussed, the majority of the ten girls in the study group had grown up in the school's rural community, attended the local elementary school, and participated in a pull-out gifted program since third grade. Comparison of their perceptions with those of girls who were new to the school community provided what initially appeared to be negative examples. Componential analysis, however, revealed these data to be supportive of the interactional nature of ability formation.

The purpose of this analysis was to describe gifted adolescent girls' self-perceptions of ability, and, more specifically, their perceptions of the relationship between ability and achievement. As gifted girls' perceptions are described, data from the taxonomies will be used to illustrate and support their perspective. The excerpts from field notes and interview transcripts used as illustrations were selected from among numerous examples as being representative of the experiences, statements, and shared beliefs of the group of gifted adolescent girls studied. To protect the anonymity of the partici- pants, ficticious names were used for students and teachers, and details about the subject being taught were changed whenever it was possible to do so without changing the data.

In the present study, gifted girls' beliefs about ability were influenced by (1) definitions of giftedness held by significant others, (2) affiliation needs, and (3) social comparison. Before these influences on the development of self-perceptions of ability are discussed, the community and school contexts which contributed to the girls' self-perceptions will be described. In this section the girls' views about themselves, as well as their perceptions of the gifted program and interdisciplinary team membership, will be presented. It is important to note that neither the girls' views about themselves, nor teachers' or peers' behaviors and beliefs alone, can sufficiently explain the perceptions of ability which emerged from the data in this study. Rather, self-perceptions of ability must be viewed as products of social interaction.

Ability and Motivation: School and Community Contexts

Callahan's (1979) observation that "girls earn higher grades in school, yet men write more books, earn more degrees, produce more works of art, and make more contributions in all professional fields" (p. 402), led her to note that our present understanding of gifted girls' abilities and motivations is inadequate. Research has failed to account for the factors which might explain the discrepant numbers of gifted men and women, or to delineate the unique characteristics of gifted females which might guide educators in the creation of effective programs for these learners. Though educators have noted the need for studies conducted from the learners' point of view

(Meighan, 1978) in order to provide descriptive data (Weinstein, 1983), little is known about the role of the school and community in the development of gifted adolescent girls' self-perceptions of ability. As Lipsitz (1980) pointed out:

> What we can say at this point is that young adolescents, at a critical stage of self-defini-tion, take their signals from society at large and from the subculture. They are dependent upon social institutions, like the schools, for the limitations or the boundlessness of their aspira-tions. (p. 29)

In the present study, the interaction between community and family values and the school experiences of gifted girls contributed to their beliefs about ability and their motivation to achieve. Before the girls' experiences in the gifted program and their team organiza-tions are described, some background will be provided on the girls' entering views about themselves. As Brim (1976) proposed, the set of ideas, beliefs, and attitudes that individuals hold with regard to the world and their place within it constitutes their conception of self. For the girls in this study, community and family values provided the background from which beliefs and attitudes about them-selves were constructed, and therefore influenced their ideas about who they were as well as who they might become.

Gifted Girls' Views About Themselves

Teachers believed that the nature of the rural community affected the school's student population, and, in particular, the gifted girls in several ways. When describing their perceptions of the girls,

every teacher, with the exception of one, referred to the influence of the community and home values on girls' attitudes and behaviors in school. Specifically, community values were believed to affect girls in that they (1) provided a well-defined set of behavioral norms and (2) restricted girls' awareness of achievement opportunities.

The set of behavioral norms to which teachers referred became obvious to the observer when documenting seating patterns in the classrooms and in the gifted resource room. Unless a teacher-made seating organization was in effect, girls and boys tended to select seats beside peers of the same sex. In the gifted room where desks were arranged in a semi-circle and the number of students in the group was small, the separation of sexes was most obvious. The girls explained this to the observer by commenting that boys and girls usually did not sit by each other "unless they were going together." The resource teacher, listening to the conversation between the gifted students and the observer, interjected the belief that this seating pattern reflected a community norm:

> Teacher: (standing beside the group of students) I call it Madison-itus. (Madison refers to the community.)
> Observer: What? What's that?
> Teacher: When you go to a party around here the men are all in one room and the women are in another.
> Several of the gifted students laugh.
> Gifted male: We just always sit that way. We were sitting on the other side (of the semi-circle), but they (the girls) pushed us around the table.

Norms of behavior which existed in Madison and the influence of individual parents were frequently cited by teachers in explaining the difference in behaviors they perceived to be characteristic of

gifted girls and gifted boys. The following excerpts illustrate teachers' beliefs about the influence of norms on gifted girls:

> Teacher A: I've never had a wierd (gifted) girl, but we've had some guys. Rick (gifted boy), for example, acts abnormally. He doesn't follow the norms of the school or the community. Our gifted girls all have consequences for poor performance at home, and the majority of them are interested in pleasing and doing well. You can't be accepted here unless you go to the right church, [your] parents know the right people, and you do the right things around town. I think our gifted girls try to please, just like other girls.

> Teacher B: (standing in the back of a classroom and pointing out a gifted girl to the observer) See Cindy? She has her hand raised. Being polite just like her mother expects. She's a producer.

> Teacher C: It's hard to tell these gifted girls that the skills they develop now will affect their future progress. I know Debbie is capable of a lot more demanding work, but I won't follow up the parent and talk. . . . I feel like an outsider. I came from a big city, and I feel like I stress academics more than anyone else here. . . . Gifted girls aren't super students in math. They tend to do well in language. (pause) I guess it's O.K. to do well in language.

An additional perspective on community norms was provided by a life-time community resident who substituted for the gifted resource teacher one day during February. After telling the observer that, though she knew most of the gifted girls slightly, she knew Cindy best through their church affiliation, she commented about the community's perception:

> Substitute: The community thinks of Cindy as a very bright girl.
> Observer: Would the community be surprised if she became a nuclear engineer?
> Substitute: Well, she is well accepted (pause) because (longer pause) because she does what the community expects a bright girl to do. She's musically inclined, she has a beautiful voice, and she's real polite. She's like a dream girl. I heard a parent

> say that one day. (pause) A lot of people would
> never say they felt differently about boy-girl
> achievements, but I guess we do behave that way.
> We separate ourselves at social gatherings without
> even knowing it. (pause) I never thought about it.

Teachers frequently described the community as a closed one which did not value academics, and, as such, restricted students' awareness of educational opportunities. One teacher, noting that he lived in a neighboring city and was not well accepted by the school's community, told the observer, "This community doesn't give kids a chance to expand their lifestyles. . . . Gifted kids here probably just have more open parents."

The teacher who taught the most classes to seven of the ten gifted girls was concerned about what she perceived to be a lack of community emphasis on female achievement. Explaining to the observer that she was the only regular classroom teacher at the school who had some background in gifted education, she voiced the opinion that gifted girls' awareness of educational opportunities might be restricted because there was a general lack of awareness that girls could be smart:

> Teacher: There's a difference between the gifted
> girls here and the ones I taught in the South. I
> don't see the aspirations for individual achievement
> here. I think it's because they don't see females
> in leadership roles and aren't brought up to see
> women as achievers. They may tell you they want to
> be doctors and lawyers, but I think their innermost
> drive is to find a husband and get married and have
> children.

The influence of parents and the community on the girls' perceptions of themselves frequently surfaced during formal interviews. Comments made by the girls in answer to the question "What kinds of

things do you want to be able to achieve?" reflected the influence of parental values. The girls' answers frequently centered on doing well to make parents proud rather than naming actual accomplishments they would like to achieve. "I listen to my mother," Cindy informed the observer. "I think she knows my potential. She doesn't encourage the idea of being a composer because it would be a hard job. Not many people do well. But it's not that she doesn't encourage me. She wants what's best for me." It should be noted that comments made by the girls reflected not only the importance of parental views, but the tendency for girls to compare ability characteristics they perceived in themselves with characteristics they perceived in their parents. Comments such as, "I think my strong point is that I'm organized--like my mother" or "My father says I'm lazy just like him!" were frequently made in connection with expressions of the desire to please parents and make them proud. The kinds of things gifted girls wanted to achieve were influenced by their perceptions of the abilities and qualities valued by parents.

The influence of community organizations on the ways gifted girls thought about themselves was also related to parental values. For example, girls who were actively involved in organizations such as Girl Scouts, 4-H, or community sports often gave examples of activities in these organizations to describe things they did well. These girls tended to have parents who were actively involved in these organizations as adult leaders or who had been involved in them as children.

One of the social institutions within the community which affected the majority of gifted girls in this study was the church. Eight of the ten girls listed God as one of the two most important things they believed in when completing a values exercise in journals kept in the gifted class. Family and friends were listed as second. The following excerpt is representative of the influence of religious values on the way girls thought about themselves and the importance of achievement:

> Cindy: A lot of ladies think . . . well, a lot of ladies are . . . as good as men and some are better, but I just believe God put men on earth first and they should take care of ladies. She should do as well as she can.
> Nancy: Man provides for women. That's what the Bible says.
> Cindy: If I apply for a job when I'm older and a man gets it, I'm not going to think he did just because he's a man.
> Observer: What would happen if you knew you were the better person for the job?
> Cindy: Well, I guess I would just have to try somewhere else.

While teachers were consciously aware of the influence of the community on gifted girls' views about themselves, they were less clear about the school's ability to expand the opportunities available to these girls. Comments such as, "Kids come in with established patterns and all we can do is work with them!" and "The school can't do everything. The parent's emphasis makes a difference in the child's emphasis" were characteristic of teachers' feelings about the school's role. A teacher who informed the observer that she had made several attempts to encourage one of the gifted girls to sign up for an advanced math class, but had been unsuccessful, remarked, "Why don't

these girls want to develop their potential? I'm not sure there's
a pat answer. I guess the school's role is to expose the student to
as much information as possible to make a wise decision."

The Gifted Program

As previously described, the gifted program at the school was a
one day a week pull-out program which aimed to improve higher level
thinking skills, creativity, and leadership potential. The fact that
there was no set curriculum to accomplish these goals was seen as a
hardship by Mrs. Johnson, the gifted resource teacher. As a result,
she developed several major themes during the year and built lessons
around them for all three grade levels. The lack of appropriate
materials and resource guides, however, apparently made the development
of higher level thinking skills difficult.

Over the duration of this study, Mrs. Johnson taught units related
to space, the arts, and the history of the community. While these
units were in progress she continued weekly journal writing assignments
designed to promote creativity and affective development. In addition,
several weeks before the end of school, she required the students to
plan and organize field trips to areas of local interest "in order to
stress organization skills and to encourage leadership and responsi-
bility."

The level of interest expressed by the gifted girls in the topics
covered by Mrs. Johnson varied. Journal writing was considered an
important and enjoyable activity, as were the informal conversations

which frequently followed the voluntary sharing of journal entries.
As Ellen explained, "A lot goes on then. We have times when we talk
or just write about things and everything comes out."

No opportunities were provided for the gifted students to make
choices about topics studied other than the selection of an individual
project which followed the unit on space. The unit, which took place
during the early stages of this study, proved particularly difficult
to teach because Mrs. Johnson was able to obtain only materials and
films which were considerably below the level of the students and, in
some cases, were noticeably outdated. The end result was that few
students were excited by the unit or by the prospect of an independent
project. The project Mrs. Johnson assigned was posted on the black-
board early in January as follows:

Space Reports

1. Choose an area of study.
2. Begin research.
   a. School library
   b. Public library
   c. University library
   d. University Science Department
   e. National Geographic (and other publications)
   f. Materials available in enrichment room
3. Write an outline. (Due Jan. 18)
4. Develop a report.

During the month of January and the first week of February,
students in the gifted room worked alternately on creative and per-
sonal writing in their journals, thinking techniques such as brain-
storming, and activities related to the unit on space. When the
February deadline arrived for presentation of reports, however, none
of the sixth or eighth grade girls were ready to present. Thus, the

first day of presentations in those classes consisted of work com-
pleted by the gifted boys. The following two incidents are illustrative
of the level of student involvement in the projects and, in particular,
the behavior of gifted girls in the resource room:

Sixth   Bobby moves to the front of the class, sets up a
grade   poster and places a written report in front of him.
         The other students sit in a semi-circle around
         Bobby. Mrs. Johnson stands in the back with a tape
         recorder and camera ready to document the report.
         Jill and Marie have open encyclopedias on the table
         in front of them and proceed to copy information and
         a diagram while Bobby talks. Bobby has most of his
         report memorized so that he does not refer to his
         notes. He concludes by explaining his poster and
         asks for questions. Eight males and Joan, one of
         the three female sixth graders, ask questions. Jill
         and Marie continue working.

Eighth   Phil and Steve, two eighth grade boys continually
grade   pointed out by the majority of girls as extremely
         smart, are the only ones ready to present today. Mrs.
         Johnson calls on Phil and explains that she will
         record him as well as take pictures. In response,
         Sally calls out: "Oh! My hair!" She then reaches
         up and pretends to smooth it. Phil ignores the
         laughter and begins his report on Saturn. Perhaps
         because he is nervous, he reads his report a a pace
         which becomes more and more rapid. As he speaks,
         Lynn puts her foot on the table and deliberately
         ties her shoe. Beside her Debbie sits quietly,
         staring under the table. Ellen begins to make sound
         effects which include the music to Twilight Zone.
         Rushing through his final page, Phil concludes by
         asking the class if they would like further informa-
         tion. In a loud voice Sally responds: "I'm not
         really interested." Mrs. Johnson looks at Sally, turns
         off the tape, and begins discussing the good and bad
         points of the audience and the report. When she
         pauses, Ellen chimes in: "I liked the organization
         and the visuals, but where's the beef?" The class
         bursts into laughter and Ellen blushes slightly.
         Mrs. Johnson rewinds the tape, plays back the first
         few minutes, and becomes distressed with the giggling
         and sound effects that were picked up on the tape.
         Looking at the class she exclaims: "This is
         ridiculous!"

The levels of motivation exhibited by both gifted males and females in the resource room varied over time and across subject matter. This was of considerable concern to the mothers of the girls interviewed during this study. One mother, after being notified that her daughter's space project had not been completed on time, told the observer, "When she got home we put her on restriction. She said she didn't get it done because the girl who worked on it with her hadn't come to school. I told her maybe I'd have her taken out of gifted because it was too much pressure on her. She says the teachers don't understand." Several other mothers expressed the concern that their daughters did not seem to be getting very much out of enrichment this year. One mother remarked, "For a while I thought she was learning a lot, but now, not so much. She thinks so too. She's at the point where she'll be glad when she gets to high school and she's not in it anymore."

Data analysis revealed that the girls who had the least social status in the regular classroom tended to describe the gifted classroom in the most positive terms. This was true even for girls like Sally whose behavior in the gifted room frequently indicated that she had no interest in the curriculum. As Sally explained, "The only time I feel part of the school is when I'm in gifted."

Field notes indicated that the verbal behavior of many of the gifted girls in the resource room was significantly different from their behavior in regular class. For example, Marie, who rarely spoke above a whisper in her regular classes, interacted more frequently and with vigor in the gifted classroom. When the researcher commented on

this observation, several girls explained their more active participa-
tion by describing the gifted class as a smaller, more intimate
environment:

> <u>Sally</u>: It's a lot different. You talk about
> feelings. . . . In there (gifted room), you put it
> (express yourself) different.
>
> <u>Lynn</u>: In here (gifted room) we're all friends.
> There aren't any cliques and no one is more popular
> unless maybe something (a status-giving event) is
> happening.
>
> <u>Nancy</u>: Gifted is my favorite class. We agree on
> the same things, like the same things, and enjoy
> being together. They understand how I feel.
>
> <u>Joan</u>: I had to throw away my I-hate-Monday-Garfield-
> tee-shirt this year! (Monday is the day Joan goes to
> the gifted class.)

A comparison of the journals kept by several eighth grade girls
in their advisor-advisee class with those kept in the gifted room pro-
vided insight into the different levels of intimacy the girls attributed
to the two environments. During a group interview these girls informed
the observer that nothing of importance was ever written in the
journals kept in advisor-advisee, and that reading them would not
produce information for this study. Sally explained, "We <u>never</u> write
anything in there! Mrs. Myers reads them." It is important to note
that Mrs. Johnson also read the gifted journals, though students in
the gifted class had the option of requesting that Mrs. Johnson (and
the researcher) not read a particular entry. It should also be noted
that girls were given no directions when writing in their advisor-
advisee journals, while Mrs. Johnson usually led a discussion based on
a selected topic as a pre-writing activity. The result was that entries

written for advisor-advisee class reflected basic daily activities, but journals kept in the gifted room revealed initimate, personal thoughts, as illustrated in the following examples:

Gifted   Connie: Friendship is what impresses me most.
journals   Everyone wants to fit in. You see someone
           everyone admires, and you want to be like
           them.

           Debbie: Life is like an endless standing in
           line for something. It just seems to go on and
           on and never gets anywhere. I wonder if I am
           accomplishing anything.

           Lynn: When you are in a fog you don't see any-
           thing, but when it leaves and you look back, you
           see all the opportunities you missed.

           Ellen: I feel like a time bomb. Things could
           explode any minute.

Advisor-   Connie: This Saturday we went shopping at the
Advisee   mall and to the movies. Ellen spent the
journals   night.

           Lynn: Yesterday I cleaned the house and read a
           book for class. My friend came over and we went
           riding.

           Ellen: I called Connie and we talked on the phone
           for an hour. Then Debbie called me.

Though the girls were more verbal in the gifted room than in their regular classes, their overall behavior in the gifted room was more passive than the behavior of gifted boys. This observation was consistent throughout the study, despite the varying levels of motivation expressed by both males and females in regard to the gifted curriculum. When activities were in progress, males moved about the room more, used a wider variety of materials, asked more questions, and interacted with each other more aggressively than did females.

When journal writing occurred, males tended to finish writing sooner and spend the remainder of the time talking to each other or to Mrs. Johnson. In addition, equipment such as the record player and computer were controlled almost exclusively by the males with the exception of the sixth grade class. These students did not use the record player, and both males and females were equally interested in obtaining time on the computer.

For the majority of girls, particularly the eighth graders, the significance of being in the gifted program had gradually decreased since their entry into middle school. Even Ellen, who described the gifted class as a place "where everything comes out," told the researcher that, "It used to be important to be in it (during elementary school). I used to love to come." On several occasions, and on at least one occasion when the observer was present, one girl skipped class and was later found by Mrs. Johnson in her regular class.

Data analysis revealed two reasons many of the girls felt participation in the gifted class was no longer important. First, the girls frequently expressed feelings of wanting to be exposed to more and different topics than were covered in the class. Human nature, relationships, physical growth, astrology, and animals were mentioned by the girls as topics they would like to investigate. Second, nine of the ten girls made spontaneous comments to the observer about very popular girls who had taken the test for entry into the program, but had missed the cut-off score by "a few points." The girls believed that including popular students in the gifted program would increase its status among students, thus making it a more appealing program.

Carrie, the most popular eighth grade girl, was often given as an example. As Ellen explained, "Carrie said she hoped she'd make it, but when she didn't, she said she didn't really want to. Now <u>no one</u> really wants to get in."

An additional explanation for the girls' feelings about the importance of being in the gifted program was offered by the principal. He described for the researcher the motivation-achievement conflict he believed characterized gifted students, and in particular, girls, in the middle school:

> Principal: The only thing about gifted is there's no real direction about what gifted kids should be exposed to. Teachers expect them to make up work they miss (on days absent for the gifted program) and the kids don't feel they should. . . . Too, gifted girls won't sign up for advanced classes because of peer pressure. They don't want to be different. That's what we do when we label them. We make them different. People don't really understand the amount of pressure these kids are under. I don't understand it. They look to others for leadership and follow their example. That's just the way it works. We've had kids tell us, "We don't want to have to work that hard." There's a few of these kids from time to time that don't let it affect them, but they're socially outcast.

In summary, the majority of girls were unsure that the gifted class was one in which they were learning advanced skills. They expressed to the observer a desire to investigate topics different from those which were part of Mrs. Johnson's program. At the same time, however, they perceived the class as one in which they were able to be themselves. The girls named Mrs. Johnson, along with the school counselor, as the adults they would most likely go to with problems. In addition, their perception of the gifted room as a place without cliques

encouraged a feeling of being understood; thus girls who had difficulty interacting verbally in the regular classroom did not have this difficulty in the gifted room. Despite the observation that the girls expressed their feelings more openly in the gifted room, when their overall behavior was compared to the behavior of gifted boys, girls were found to exhibit more passive behaviors.

Members of a Team

Membership on a team was an integral part of the student experience at this middle school. Over the duration of the study numerous students from both teams discussed their perceptions of school with the researcher, perceptions which were phrased in terms of team life, and which often compared one team to another. Students who shared their perceptions with the researcher, including the gifted girls, believed that the two teams offered very different learning experiences.

As previously discussed, the researcher spent several weeks collecting observational data in both teams, and three-week periods in which observations were solely focused on a specific grade level within one team. During these three-week periods the researcher compared gifted girls' perceptions of the team with the behavior of teachers, peers, and the girls themselves. Gifted girls' experiences as members of Team One and Team Two will be discussed separately.

Gifted girls' perceptions of Team One

Team One contained all of the eighth graders and half of the seventh graders in the school. At the time of this study, seven of

the gifted girls were members of the team. This group of girls included one student who was new to the school and six who had been members of Team Two the year preceding the study. Their comparisons of the two teams provided insight into gifted girls' perceptions of classroom features and the effects of these features on motivation and ability perceptions.

The majority of Team One students who discussed their perceptions with the researcher, including the seven gifted girls, described the team as much freer. Observations and interview data indicated that the girls used this term in two different ways. First, the gifted girls believed that a wider variety of classroom behavior was tolerated by teachers in Team One. Additionally, the girls believed that the work they produced in Team One was evaluated by less strict criteria, and thus, they had a greater degree of freedom when completing assignments. As Cindy explained it, "Team One is just freer! I like it better because things don't always have to be perfect like the teacher wants. In Team Two if you didn't do it exactly a certain way you lost points."

Data indicated that these student perceptions resulted from the consciously organized system of beliefs about students' developmental levels and teaching that guided the team teachers' decisions and behavior. Team One teachers believed that seventh and eighth grade students should be able to manage themselves without teacher-imposed restrictions, and that teachers should concentrate their efforts on the cognitive dimension of the curriculum. The teachers' attitudes are illustrated in the comments below:

> Teacher A: Our team provides students with more
> academic focus than Team Two. We have to prepare
> them for high school. We try to wean them. . . .
> Each level sees the other level as a jungle. We
> tell them stories (about high school) all the time.
> I know I do.
>
> Teacher B: Our emphasis has to be on content . . .
> on academics. . . . It's our obligation to warn them
> about next year (high school).

Observations of Team One indicated that the teachers' focus on

academics without an organized and consistently implemented management

strategy resulted in less actual classroom time being devoted to lesson

content. Rather, in Team One, a greater portion of classroom time

was spent managing transitions, organizing for instruction, disciplining,

and repeating directions. The following excerpts from field notes are

illustrative of the particular experiences of the seventh and eighth

grade gifted girls in Team One:

Seventh grade pre-algebra
The teacher begins class by rapidly calling out
the answers to last night's homework without look-
ing up. All students have exchanged papers and are
checking answers, with the exception of two females
who are sitting beside the observer. They complete
the assignment seconds before the teacher finishes
calling out answers. The process takes 10 minutes
after which the teacher spends five minutes
introducing the lesson on properties, and assigns
two pages to be completed. During his presentation
Cindy has been listening carefully, but Nancy,
sitting several rows away from Cindy and in front
of the observer, has been completing a geography
assignment. Her geography book is openly displayed
on her desk. The teacher asks if there are any
questions. None are asked. Cindy and her best
friends, two girls she sits beside in almost every
class, begin the assignment but are distracted by
a scene one row in front of them. A male (gifted
student) has attached his baseball glove to his desk
chair with a combination lock before leaving his
seat, and two other boys are trying to remove it.
Cindy catches the observer's eye and laughs. Mean-
while the teacher is calling out names and recording

grades. When he finishes he asks that papers be passed in. It is now ten minutes into the work period and Nancy opens her math book. Just as she begins to work the teacher calls her up to the desk. From their conversation it is apparent that, though Nancy called out a grade, her paper is not in the pile. Nancy goes to the trash can and begins searching. After class the teacher tells the observer that Nancy threw away her paper because it only contained answers and no solutions. Several days later Nancy recounts the experience to the observer by explaining there was no need to work the problems.

<table>
<tr><td>Eighth
grade
science</td><td>The teacher announces that today a review of the metric system will be conducted to get ready for standardized achievement tests which are coming up. The observer is sitting at a table with three gifted females, one gifted male, and another high achieving female. They groan loudly with the rest of the class and someone calls out, "Do we have to write?" Janet, the high achieving female tells our table, "I hope not! I'm going to fail anyhow." The noise grows and prompts the teacher to tell the class, "Shut-up." He explains that he is sick of rudeness, turns to two males still talking, and sends them out. The lesson begins but Ellen has to get up frequently to open the lab door for students who are late because our table is in the rear of the room. At one point she accidently shuts the door on a male who yells out. The teacher becomes very upset and tells the male, "Don't open your mouth again this period. Unless you all treat me with dignity, then mine will fly out the window." The lesson proceeds and the teacher calls on Ellen to answer a question. Ellen: "What did you say?" Teacher: "That's right! What did I say? I'm going to ask you again and you better get it right!" He repeats the question, Ellen answers correctly, and the students at her table sigh almost in unison. Debbie: (to the observer) He's our favorite teacher even though he gets mad. The teacher asks a question about milliliters and Janet whispers to our table, "Millie Jackson? I know her!" The students at the table burst into laughter.</td></tr>
</table>

Team One teachers were aware of increasing behavioral problems as the school year approached the last grading period, and, at one

point, the school's dean was asked to sit in on several classes to
observe the students. When questioned about student behavior, however,
the teachers maintained that the students needed to learn to manage
themselves. They did not appear to be aware that the need for increased
discipline left less time for academics.

Though the gifted girls frequently informed the researcher that
they liked Team One much better than Team Two because of the freedom
it allowed them, several of the girls expressed an awareness that this
atmosphere influenced their motivation. As Connie explained it, "These
teachers have a different attitude. I don't really know what the
difference is . . . but we aren't being pushed." Sally identified
the difference as a lack of enthusiasm. The majority of girls felt
that teachers actually ignored their inappropriate behavior such as
passing notes and talking. Nancy described Team One as a team whose
student members "have a problem. Kids on our team just don't work
a lot." The general consensus was that in Team One, students and
teachers had less time to form relationships and that teachers were
less interested in students.

Observations and interview data indicated that, with the exception
of Cindy, the gifted girls in Team One were frustrated and confused
about their lack of motivation, as the following excerpts illustrate:

> Nancy: I try, but I can't make myself do it (school-
> work). I guess I want to do other things. (She
> shrugs.) I've thought about it, but I can't figure
> out why.

> Ellen: (to the observer) I <u>cannot stand</u> to do my
> homework. I've got a hundred million things I'd
> rather do than my homework. My mom says I'm so lazy
> it stunts my mind. There may not be much homework,
> but I hate it!

> Lynn: (in response to the gifted teacher's comments about the need to sign up for advanced classes) Just because they are gifted doesn't mean gifted students have to take all honors! I don't feel like I'm missing anything by not taking honors.

These girls frequently informed the researcher that the curriculum was a routine which rarely changed.

Data from the researcher's field notes which were gathered during early observations in Team One illustrated the routine format of the curriculum. At the conclusion of several entries the researcher had written the following question: What is happening in this class? On these occasions the researcher had been unable to document the point at which the teacher began the lesson and ceased clerical work, the assignment given the students, or how the teacher determined who was and who was not working. Students in the classroom, however, seemed to have prior knowledge of what was expected. After observing one such class in which the teacher spent the majority of the class period standing beside the overhead projector, answering questions, and occasionally writing a student's name on the screen, the following conversation took place:

> Observer: I don't understand what everyone was doing in literature today. I never heard the assignment.
> Connie: Oh! (She looks surprised.) We have a tight structure (schedule). On Monday we do vocabulary and on Tuesday and Wednesday we read the stories. We have two days because they are so boring. I looked at the copyright on the book. Would you believe it's 1956? (She grins.) On Thursday we do questions and on Friday we turn in our stuff and take a test. It's the same every week.
> Observer: Do you know the reason?
> Connie: Well, literature is right after algebra so she just gives us assignments (in literature). It's the teacher's planning time. She grades and reorganizes her afternoon.

> Observer: Oh. Do you know why names were on the
> overhead?
> Connie: Those are people who get too loud. See,
> she tells us we can talk in class if we turn in our
> work on Friday and if we keep the noise down. I'm a
> social bug. I like to talk.

Subsequent observations of this class, and algebra, revealed little

variation in the schedule Connie had outlined. As late as the middle

of April the same structure was the classroom norm, as indicated in

this excerpt from field notes:

> The observer enters during algebra and sits beside
> Ellen and Connie.
> Observer: (to Ellen) What's going on?
> Connie: (interrupting Ellen) It's like I told you
> before. We have a schedule. She gives us our
> homework and we can either do it here or at home.
> I like to do it at home.
> Observer: But why is she standing up there?
> (The teacher is standing beside the overhead.)
> Connie: She works things out when we ask. She
> just stands there the whole period.

The researcher observed the girls use three different strategies

to cope with the routine. Frequently they used work time in class to

talk, pass notes, or study other subjects. On occasion, however,

several of the girls were observed using time in class to write un-

assigned poetry or songs. On one such occasion Sally was so pleased

with her efforts that she approached the researcher during the class with

a song she had just completed. After asking if a copy could be

included in the field notes, the researcher indicated it was difficult

to imagine the tune. The following week Sally handed the researcher a

taped recording of the song in which she sang the melody and used

sticks to tap out the beat. The song was about being in love. Thus,

a second way of coping with the routine was to use time in class to

pursue topics of individual interest. In Sally's case, the researcher's
expression of interest in her work may have increased Sally's task
motivation.

A third method of coping with routine assignments was used
exclusively by Cindy and her two best friends, both high achieving
girls, but not identified as gifted. These girls sat together in the
back of their classes and were always observed to be busily involved
with tasks. On some occasions at the beginning of the study Nancy
would join the group, but her involvement was infrequent and decreased
with time. Observing this group of girls at work in social studies
one morning, the researcher asked Nancy to describe what was going on:

> Nancy: Cindy's group passes papers around with the
> answers on it so you really don't have to talk. This
> is a better system. Everyone works on one question
> and everyone shares answers. It's not cheating. The
> homework (classwork) doesn't count as much.

While the majority of gifted girls in Team One described feelings
of frustration concerning their levels of motivation, it was none-
theless important to do well. However, because doing well was a
concern, the girls frequently expressed a desire to avoid taking risks
which might result in failure. This became most obvious toward the
end of the year when five of the Team One girls were preparing to
register for high school. The following incident occurred late in
March when the algebra teacher distributed a test designed to help
place students in math courses the following year:

> Prior to the beginning of class, the observer,
> sitting beside three of the gifted girls, asks
> the girls if they have studied for the test.
> Debbie informs the group that she will repeat
> Algebra I even if the test shows she should be

in Algebra II because she doesn't understand
Algebra I. The teacher enters the room and Ellen
calls out, "What if we don't want to take the
test? What if we want to stay in Algebra I?"
The teacher ignores her comment and distributes
the test. The observer notes that Ellen is one of
the first students to finish the test, and, after
class, asks Ellen if the test was easy. Ellen
replies, "No. I just quit. I want to go into
Algebra I next year because my grades have gone
downhill this year from an A in the beginning to
C's the last two times. I'm afraid to go into
Algebra II. My dad wants me to take it (Algebra
II), but he also doesn't want me to get C's. I
don't want to flunk."

Gifted girls' perceptions of Team Two

Team Two contained half of the sixth and half of the seventh
graders in the school. At the time of this study, three of the gifted
girls were members of this team. The comparison of these girls'
perceptions with the perceptions of the six gifted girls who had been
members of the team the previous year provided additional insight into
gifted girls' experiences in Team Two.

Gifted girls in Team Two described the team in terms of
student-teacher relationships. As Jill told the observer, "It's
funner on this team because you're closer to your teachers. You're
like a big family, but if you're in the whole school you don't feel
that way. It makes you feel like doing your work more." The girls
in Team Two perceived that the teachers cared more about them, and
therefore, gave them more chances to prepare for tests.

When asked how they would describe Team Two to a new student,
the gifted girls most frequently mentioned the activities that were

continually occurring in the team. The team's newspaper, student
council, and student monitor system were a source of pride, and on
occasion, discomfort for the girls. The following excerpts from field
notes are illustrative of student experiences in Team Two:

Sixth
grade
social
studies

The class begins with a discussion of women's roles
in early American history, but quickly moves to a
discussion of American aggression. Noting that no
girls contribute to the initial discussion, the
observer begins to count the number of male-female
responses. At the end of 20 minutes one girl has
offered an opinion as compared to 15 boys. The two
gifted girls in this class sit quietly at opposite
ends of the room. Marie sits beside the teacher and
Jill sits in the last row. During the discussion
Marie smiles at the teacher's jokes and reacts
facially to students' comments but does not speak
out. The discussion, a controlled lesson in which
each student's contribution is reacted to by the
teacher, shifts to last night's reading assignment
and almost immediately the female participation in-
creases. During the remainder of the class the ratio
of male to female interactions is 18 to 12. Though
Marie sits in the section of the classroom in which
most of the interaction occurs, she speaks out once,
in a whisper, and only because she is directly
questioned. Students sitting around the edges of
the room, including Jill, interact less though they
all appear alert and attentive. The teacher seems
to be very interested in the students' ideas. He
keeps the discussion moving at a fast pace and on
occasion interjects humor. Two minutes before class
ends the team area becomes noisy. The teacher walks
to the center of the area, cups his hands around his
mouth, and calls out to all four classes in session,
"Quiet! I have two minutes left!" Several students
in the room grin. After class the observer shows the
teacher the tally of male-female interactions. The
teacher is initially surprised. He pauses and then
comments that this reflects the community.

Sixth
grade
team
meeting

It is 8:35 and a team meeting held regularly every
Friday morning is in progress. Elected student
leaders, as well as the team leader, run the meeting.
Today is Hat Day and prizes are given away for the
most creative hat. Jill wins first place. All the
team teachers, including the resource teachers, are

present, and some have on hats of their own. The
meeting ends with the singing of a team song. Jill's
picture is taken with an instamatic camera and placed
on a large bulletin board which contains both school
and community news about student members of the team.

Sixth   Student monitors are dismissed a minute early from
grade   class and gather at their appointed posts to oversee
lunch/   the lunch period. The observer joins Marie and Jill
reading   in line. The girls explain that monitors are selected
            at the beginning of the year and that it is their job
            to see that team rules are followed. A table is
            selected and several of the girls' friends join them.
            Just before the observer, Marie, Jill, Joan, and two
            other females leave the lunchroom, a monitor who is
            also a close friend of Marie and Jill approaches the
            table. Monitor: "Please remember to behave." Marie
            looks at the observer, makes a face, and silently
            forms the words, "Stuck-up." Monitor: "Just behave!
            I don't feel like putting up with any of that today!"
            The girls grin at each other. After lunch, the three
            girls are involved in different reading classes.
            The observer selects a seat which provides a good
            view of all the classrooms. Though one class spends
            some time going over vocabulary, there is very little
            talking. For this hour students are involved in
            workbook or kit activities and work individually.

Team Two teachers described their team as more student-centered

than Team One. They actively encouraged the students to consider

themselves a family, often using the term publicly to reward or punish

students in connection with their behavior or their classroom achieve-

ment. Comments such as, "Monitors are supposed to set examples!" or

"Why did you do that? We work together in here!" were used to reinforce

proper behavior while pointing out student responsibilities.

The gifted girls in Team Two tended to like a wider variety of

subjects than girls in Team One, and perceived themselves as good

students in most classes. This may have resulted from the girls'

belief that teachers "care about how we do." In comparison to the

girls in Team One, these girls rarely described the curriculum as routine. The researcher's observations, however, revealed the format of the curriculum in Team Two to be similar to that of Team One. This was especially true of language arts and reading classes which were typically conducted using structured schedules such as those used in Team One. Perhaps because the teaching materials used for language arts and reading included kits, workbooks, and story questions which were mandatory, teachers found it convenient to divide the work according to days of the week.

Data analysis indicated that, unlike the gifted girls in Team One who tended to joke about and exaggerate their potential for failure, girls in Team Two expressed their anxiety about good performance and high grades in a more concrete manner. They more frequently expressed concerns about their abilities prior to tests or major assignments, and their comments tended to be specific to the subject itself. In contrast, Team One girls joked about grades and failure in general terms. While observation and interview data did not indicate that the joking behavior of Team One girls necessarily implied a less serious attitude, data analysis did indicate that for Team One girls, the immediate classroom consequences of poor performance were less frequent and less public than for girls in Team Two. Thus, Team Two gifted girls appeared to express subject-specific concerns about ability more frequently, and without the teasing quality which characterized the comments of Team One girls. When the researcher asked about the difference in joking behavior, girls and their mothers spoke about the more public nature of evaluation and feedback in Team Two:

Cindy: Team Two was hard. I'd be so scared to get called on that I'd pray. Once one of my friends begged the bus driver to go back to her house so she could get a paper she forgot because the teacher told everyone they'd get a zero, and she (the teacher) really picked on everyone!

Marie's mother: I think Marie fears being labeled . . . and teased about being gifted . . . about maybe not being smart. One teacher in particular this year (Team Two) must put all the students down. I think they (students) wrote a report or something and she told some students, "These gifted students may be smart, but they sure don't know how to write a report." Marie has made some comments about this at home. . . . Her friend, Katie, told her that this teacher told Katie that Marie doesn't want to share her knowledge (referring to Marie's tendency not to speak out in class). Katie told Marie.

The feelings of anxiety described by the girls who were members of Team Two during the study, or who had been members in the past, resulted in large part from a system of competition used by three of the four teachers on the team. The system was called Dynamic Dozen. Each grading period teachers using the system averaged grades to determine the twelve highest grade point averages in the class. Those students were seated, in order, in a special section of the room in front of the teacher's desk. They were also given the privilege of leaving the team area for water or the bathroom without having to ask for permission. In addition, the student with the highest grade point average was called the Wizard. This student sat beside the teacher, which meant, in some cases, the Wizard's desk faced the class rather than pointed in the same direction. The Wizard called roll, signed late slips, and acted as the teacher's helper. To be a Wizard was considered a position of prestige by the majority of students not only

because of the special privileges, but because the students who were Wizards received frequent praise and attention from all three teachers.

Marie's experience as the Wizard provided insight into the anxiety described by girls in Team Two. In the following excerpt, Marie's mother told the researcher how Marie felt:

> Marie's mother: Being Wizard puts pressure or her and she says she gets a lot of cracks (comments) about it. She likes being Wizard so she puts up with it. Maybe she likes the prestige, but she doesn't like the cracks.

From the onset of data collection until the final grading period of the year Marie had the highest grade point average in her social studies class. She sat beside the teacher, and though she rarely spoke in class, she enjoyed the prestige of being called by pet nicknames and being relied upon as the teacher's helper. Marie also, however, frequently mentioned her fear of doing poorly or getting wrong answers in this class as opposed to any other class because of the teasing she would have to endure. Noted Marie, "It's bad (difficult) to be in those seats. You feel proud, but if you get called on and you don't know the answer the teacher makes cracks. Like 'These are supposed to be the Dynamic Dozen and they can't answer!'" It was even more difficult for Marie who felt that her status as gifted made other students more eager to compete for her seat as number one. While sitting in the library before school one morning, Marie pointed out a classmate to the observer and commented, "He hates me because I'm Wizard."

During the final grading period of the study Marie lost her seat, but to another gifted student, Jill. On the day seating was changed in the class, the teacher first had all the students stand, seated the Dynamic Dozen in order, and then assigned seats to other students. Students not seated with the Dynamic Dozen jokingly referred to their seats as the ghetto. Marie was absent for the seat assignments and did not return to school for several days. After class the researcher asked the teacher how Jill and Marie might feel. The following excerpt reflects the teacher's beliefs:

> Teacher: Jill feels proud. She's been striving all year. I can't tell you how Marie feels at all. I've been trying really hard to get her to open up and she has a little, but it's been minor. . . . I don't want to feel like I'm defending my program. I have some conflicts about it too, but it's the only thing that seems to motivate them. I'm not a cartoon character and I can't do a song and dance everyday. I do enough of that as it is.
> Observer: Do you think Marie might be absent because she's upset?
> Teacher: I think the way Marie is handling this is very healthy. If she is upset she's not letting us know publicly. Life is very competitive and full of upsets. We need to know how to handle them. (He looks down at the table for a moment and then gets up to leave for a parent conference. He talks as he exits.) Marie's and Jill's class is so competitive that we've gone to a point system instead of using letter grades. They wanted to see the minute difference.

The researcher encountered Marie in her gifted class when she returned to school. She informed the researcher, Jill, and Joan that she had been ill with an allergy. Class had not yet begun and the girls were sitting on a table near the computer. "Well, don't be mad at me," Jill told Marie. "It's not my fault."

The use of a competitive system such as the Dynamic Dozen made knowledge of student status very public in Team Two. The researcher often overheard students discussing other students' seat numbers and who was the Wizard in which class. The fact that there was a limited number of status positions, only one way to achieve them, and public knowledge of one's place within the system made many students anxious. This was especially true for the gifted girls. Cindy, referring to her experience in Team Two the preceding year, told the researcher, "I didn't like it. We're not here to compete. We're here to learn. . . . In Team Two you're demanded to work, and you do, but that won't help you in the end. That's not how life is."

It is important to note that Team Two teachers using the Dynamic Dozen system to reward achievement discussed the abilities of the gifted girls they taught in very specific terms. These teachers used a wider range of adjectives, from adequate to excellent, to describe the performances of present and past students and referred to the girls' participation in team activities and their placement in the Dynamic Dozen as evidence for their evaluations. Team One teachers tended to differentiate among the performances of gifted girls less, agreeing that, of all the girls, only Cindy stood out as a performer.

In summary, the girls' perceptions of team organizations focused on student-teacher relationships. In turn, these relationships influenced the girls' motivation to achieve. In Team Two where teachers and students were believed to have closer relationships, the girls tended to like a wider variety of subjects and perceived themselves as good students in most classes. In Team One, described

by the girls as free and by teachers as content-centered, girls tended
to state preferences for specific subjects over others.

Student-teacher relationships also affected the ways girls
described the structure of the curriculum. Though observation re-
vealed curriculum format to be similar on both teams, the girls in
Team One more frequently characterized their classes as routine. For
girls in Team Two, the belief that teachers cared more about their
progress encouraged the girls to view the curriculum as more impor-
tant, and therefore, less routine.

Additionally, the nature and quality of evaluation feedback were
important constructs in girls' descriptions of team experiences.
The girls in both teams expressed concern about their abilities to do
well, and to please teachers and parents. Doing well presented a
special problem in classes where the evaluation of students was more
public, and based on narrowly defined criteria such as the system used
to determine members of the Dynamic Dozen. These girls expressed fears
of being disliked if they stood out in comparison to their peers.
Additionally, the possibility of not knowing an answer and being
subjected to public criticism was a source of anxiety.

In this section gifted girls' entering views of themselves and
the school experiences they encountered as a result of participating
in a gifted program and team organizations have been described. These
school experiences can be summarized in two ways: 1) the girls were
generally passive receivers of knowledge, and rarely active investi-
gators; and 2) the girls believed that more was expected of them
though participating in the gifted program meant they had less time

to do it. Removal from classes one day per week meant being absent from daily class activities for one-fifth of the year. For students who were absent other days due to illness, the effect could be disasterous. This was true for Jill who, having missed numerous days of school at the beginning of the study, found herself seated in the ghetto (Team Two) in several classes.

Being in the gifted class did provide some opportunity to participate more actively, but, just as the goals of the gifted program were described by Mrs. Johnson as affective, the active student role was primarily one of exploring feelings rather than constructing knowledge. The majority of girls in this study expressed confusion and frustration about their roles as students and concern over their perceived lack of motivation.

The researcher assumed from the outset that self-perceptions of ability were constructed through an interactive progress. That is, self-perceptions of ability reflected the interaction of girls' attitudes, perspectives, and values with variables inherent in the school environment. In the next section factors influencing the construction of gifted girls' self-perceptions of ability will be discussed.

Beliefs about Ability

Many educators have noted that issues of ability, achievement, social acceptance, and gender identity are sources of conflict for talented and gifted female adolescents (Fox, 1978; Horner, 1972;

Rodenstein, Pfleger, & Colangelo, 1977), and that generally, when compared to the gifted male, the gifted female is less likely to realize her potential (Blaubergs, 1980; Callahan, 1981). The importance of this assertion is illustrated in the work of Brookover and Erickson (1975) who referred to perception of ability as a "functionally limiting threshold condition. It functions to set limits on what we decide to do" (p. 275).

Perhaps the clearest finding to emerge from this study was the cyclic relationship between gifted girls' self-perceptions of ability and their daily school experiences. Gifted girls in this study used school experiences to interpret and modify their beliefs about their own ability, and, in turn, their beliefs about ability guided their choices of behavior at school. Observations and interviews from this study provided evidence that gifted girls' beliefs about ability were influenced by 1) definitions of giftedness held by significant others, 2) affiliation needs, and 3) social comparison.

Multiple Definitions of Giftedness

When asked, "What are gifted students like?" the majority of teachers in this study responded that their conceptions of giftedness did not always match the observable characteristics of students identified by state criteria as gifted. To illustrate this mismatch for the researcher, teachers often compared the behaviors of identified gifted girls with girls they considered bright. Bright girls were described by teachers as more motivated, more enthusiastic, and more

verbal in the classroom than were the gifted girls. Many teachers observed that in each of their classes there were several high achieving girls who were more academically inclined that gifted girls.

This discrepancy between the behaviors of girls identified as gifted and girls who appeared bright to the teachers frequently led teachers to question the construct of giftedness. As one teacher explained, "My definition is that on Wednesdays and Fridays I'm missing a certain number of students. That's the only thing I know. They have to make up the work." Other teacher definitions of giftedness fell into three categories: 1) references to the 130 score on an IQ test, 2) descriptions of students as productive workers achieving their potential, and 3) descriptions of cognitive abilties which enabled students to think deeper, perceive more, and see relationships between things that did not normally go together. Teachers using the second and third definitions tended to name only one or two of the gifted girls who fit these definitions. The consensus was that teachers could not tell if the majority of identified girls were gifted. Though teachers expressed an awareness that gifted girls' behavior might result from a desire to avoid standing out, the consensus was that these girls behaved "just like all little girls growing up," with the possible exception of the more motivated, bright girls.

When asked if their beliefs about giftedness might influence their interactions with the students, teachers indicated that they were not aware this ever happened, or that strict curriculum require-ments and the limitations of open space did not permit them to treat

gifted students differently. The following excerpts from interviews
with teachers illustrate their views:

> Teacher A: I talk to them the way I talk to other
> students. I don't mention their giftedness. Maybe
> they think I do because I expect them to work up to
> their ability.

> Teacher B: I talk to them like adults. If it's a
> difficult job I tell them they can do it because
> they're smarter than the average bear. They react
> well to this.

> Teacher C: Gifted doesn't correlate with production.
> Not at this age. Our curriculum doesn't lend itself
> to the gifted so I find it hard to provide for them.

Further insight into teachers' beliefs about giftedness was provided
by a resource teacher who was informally interviewed during a teacher
work day:

> Observer: I'm curious about how the school
> perceives these girls.
> Teacher: We . . . um . . . sound real negative,
> and that's not good. I think something needs to
> be done about teacher attitudes. I think teachers
> expect more because they're gifted and it could be
> because we really don't know what gifted is. I
> wonder if, because they're taken out of classes
> more, given special privileges, and allowed to do
> more, there isn't somewhat of a grudge. Ask around
> and listen to what teachers say. You'll probably
> hear teachers say, "I really don't know how so and
> so got in. They're really dumb."

The gifted girls themselves frequently expressed the belief that
participation in a gifted program which entailed removal from their
team areas one day per week made them targets of confusing and often
uncomfortable expectations from teachers and peers. For these girls,
being labeled gifted often produced classroom situations in which
their competency was publicly questioned. For example, when, during
group interviews, the girls were asked about abilities that related

to being gifted, they used conflict-producing situations to explain

their perceptions. It appeared to the girls that teachers referred

to their giftedness in ways that made them more apt to fail in school

situations. Consequently, they felt confused and frustrated, as the

following excerpt illustrates:

> Lynn: The only reason we got in there (gifted pro-
> gram) is because we are more capable. . . .
> Ellen: We were smart when we were tested.
> Lynn: Because we're capable of doing more than we
> are but we don't do it.
> Observer: What makes you not do it?
> Several girls try to speak at once, but Lynn
> interrupts.
> Lynn: (excitedly) It's hard! It's really hard
> for us! It makes it harder for us than other
> students because they (teachers) expect us to know
> more!
> Sally: They'll be explaining something and they'll
> ask an enrichment student a question, but we don't
> know how to do it. We've never seen it before, but
> they expect us to!
> Debbie: Especially one teacher! He'll be ex-
> plaining something and then he'll ask a gifted
> student a question, but they won't know it. He'll
> say, "Well, you're supposed to know it. You're
> in gifted."
> Sally: How are we supposed to know the stuff before
> we are supposed to? It makes it harder for us.
> Ellen: Yeah. They think we're so. . . . You
> know. . . . (Her voice trails off.)

Comments made by the sixth grade girls during these interviews

revealed their concern about not always knowing answers. "I do well,"

explained Marie, "because I know the answers on tests. Not any other

time. . . . I don't always know the answers when he (teacher) asks

you questions about the reading." Seventh and eighth grade girls

discussed similar feelings with the observer, but referred more often

to their concern about appearing to be too smart around peers. For

these gifted girls, knowing the answer was, in large measure, the

definition of giftedness. The confusion they expressed was charac-
terized by concern over the possible public disclosure that they did
not know the answer and a fear of peer rejection if they appeared too
bright too often.

The girls' perceptions that they should know the answer, but that
appearing to be a brain was not normal, produced a unique conflict
between their identity as gifted and their need to be accepted within
the school culture. Comments such as the following were characteristic
of the girls' feelings:

> Joan: People ask you questions and if you don't
> know the answers they'll say, "W-e-l-l! (She pro-
> nounces the word with mock indignity.) I thought
> you were in enrichment. I thought you knew every-
> thing!"

> Sally: Just because we're in enrichment doesn't
> mean we know everything.

> Ellen: In social studies this morning a guy said
> to me, "I thought you were in enrichment and I'm
> smarter than you." (This comment was made after
> Ellen missed the answer to a question.)

Perhaps in order to cope with this conflict the girls frequently
expressed the idea that, while they might have potential, they were
no different and no smarter than other girls. The idea of potential
enabled them to credit their successes with trying and their failures
with not trying. Having potential offered a safe explanation for
not always knowing the expected answer, while, at the same time, it
created the acceptable role of someone-who-tries in place of the
unacceptable role of someone-who-knows, the brain.

Constant references to potential as an explanation for their
placement in a gifted program were made by girls during individual and

group interviews. At the same time, however, many of the girls
expressed the idea that potential was something everyone had. An
eighth grader explained, "I feel everyone has the same intelligence
level. Motivation is important. If you try hard enough and motivate
yourself, you can do anything." The idea was further clarified by
Lynn after finishing a particularly difficult test:

> Lynn: Some people say, "Look at the brain! She
> knows all the answers. Some of those people could
> be just as smart as us if they'd study. They just
> don't want to take the time.
> Observer: Are you sure studying is the only
> reason?
> Lynn: (Pause) I don't know. I try to be nice to
> everyone. I don't want to be a brain. I try to
> have fun.

The day after being absent from regular classes for instruction
in the gifted program was a particularly frustrating one for many of
the girls. The policy of completing classwork missed on those days
differed with different teachers, and was often a source of problems.
Jill and Marie described their frustration this way:

> Jill: She (the teacher) doesn't like the enrich-
> ment (gifted) kids much. She says we don't come
> and get our work, and I always do. Or she says we
> aren't prepared. She wishes there wasn't any
> enrichment. Science is my worst subject anyhow.
> We have to go after school to get our work and it's
> hard! She says all the teachers say we don't get
> our work.
> Marie: She told me (mimicing the teacher's voice)
> "You have your Skillpac all done, but you ain't
> going to be so lucky in science!"
> Observer: She said that to you?
> Marie: Yeah! (nodding her head rapidly)

In an effort to cope with the expectations they perceived others
to have, the girls often behaved in ways that would avoid conflict-
producing situations. Analysis of classroom interaction in this study

revealed that gifted girls very rarely volunteered to answer questions
or make comments during their regular classes. In addition, when
students had the option of selecting seats, they most often sat in
the rear of the room where the possibility of interaction with the
teacher was minimized. As one sixth grader explained, "I sit here
because she (the teacher) never looks here." The fear of being
singled out and failing to know the answer was especially intense for
these girls when the class was one in which they perceived themselves
to be most able, when the teacher was one the student especially
liked, or when a situation involving direct competition was occurring.
For example, two of the girls described the following situation during
an interview:

> Cindy: I get so sick of it. It happened yester-
> day when we were playing a game to review for the
> test. When the team gets in a tight spot they say,
> "Ask Cindy! Ask Cindy! She'll know." I got really
> mad. Even my best friends do it.
> Nancy: (looking at Cindy) Yeah, but did you see
> me go up there? I knew the answer, but I wasn't
> going up there. Not even for the team.
> Cindy: I've asked them not to do that. It's
> embarrassing to me. Now what if I got up there and
> it happened to be a question I didn't know? It'd
> make me look worse. I don't want to look like a
> brain!
> Nancy: (to the researcher) She's normal.

While data collection in this study focused on the gifted female
population, evidence suggested that gifted males were no less aware
of confusing expectations. However, males seemed to place less
significance on these expectations. For example, field notes indicated
that gifted males were less likely to mention concern with teacher or
peer approval, and less likely to modify behavior even when the behavior

was negatively sanctioned by teachers or peers. This will be discussed further in the following section on social comparison.

Similar perceptions among the males and females about differing expectations for gifted students, yet differing reactions to these expectations, may have resulted from greater role variations that teachers allowed males. Teachers believed the difference between gifted and nongifted boys to be far greater than the difference between gifted and nongifted girls. Teachers also believed that gifted boys' behavior patterns deviated far more from the norm than did girls'. The prevailing attitude was that teachers expected the gifted boys to be greater risk takers.

Gifted girls were aware that their reactions to expectations differed from the reactions of gifted boys. An explanation for the difference between gifted boys' and gifted girls' reactions (according to the girls) was the idea of perception. "I guess girls are a lot more sensitive than boys. If people make fun of guys, they just say you're dumb. But girls! We take it more personally than they do."

The following example illustrates the extent to which definitions of giftedness affected the gifted girls at this middle school. The example is representative of many instances when the gifted girls pointed out to the researcher their conscious "bad" behavior. In this instance the opportunity to fit in had an unexpected outcome, and, as such, was also an illustration that definitions of giftedness did indeed exist among peers:

> Students in biology are beginning an experiment
> to determine if a substance is an acid or base.
> They organize themselves at lab tables in almost
> exactly the order in which they had previously

been sitting in class. This makes Sally and
Lynn, two gifted girls, lab partners. The
observer drifts over and sits with Sally, Lynn,
and two other girls.
<u>Sally</u>: (to the observer) You should have seen
Lynn's face when you walked into history.
<u>Observer</u>: Why? What happened?
<u>Sally</u>: We were acting bad. (She grins.)
Sally and Lynn begin playfully arguing over lab
materials, pushing and laughing.
<u>Girl 1</u>: Yeah! Look how immature they act!
<u>Girl 2</u>: And you're <u>supposed to be</u> gifted!
<u>Lynn</u>: (angrily) And you're <u>supposed to be</u> dumb!
<u>Sally</u>: Yeah! (moving behind Lynn) What's your
definition of gifted anyhow?
Though the teacher overhears this and catches the
observer's eye, he makes no effort to intervene.
A brief silence is followed by preparation for
the lab.

In summary, multiple definitions of giftedness contributed to
the confusion about ability perceived by the gifted girls in this
study. In order to cope with this confusion, the girls frequently
referred to themselves as having potential rather than having ability.
The gifted girls in this study tended to underestimate their own abili-
ties to do well in order to avoid conflict-producing situations. As
Cindy informed the researcher, "I'd rather have teachers who don't expect
too much. That makes it easier to please them and then their job
isn't so miserable."

Affiliation Needs

The questions which emerged during the early stages of data
collection and analysis for this study were "What things cause these
gifted girls concern or anxiety?" and "What makes them happy or gives
them a sense of accomplishment?" The answers to these questions led
the observer to focus on the importance of relationships in assessing

one's ability. The girls in this study expressed beliefs that being liked by their teachers enabled them to do better in class. In addition, they believed that being successful in their interactions with peers, or being socially competent, was an important indicator of future success and happiness. Thus, being socially competent was, itself, an area of achievement.

In delineating the factors which caused gifted adolescent girls anxiety, or which brought them a sense of accomplishment, the data analysis indicated that the girls in this study believed that affiliation (being liked) was itself a means to greater achievement. That is, on numerous occasions they expressed the belief that if a teacher liked you, you were more apt to do well. The belief that being liked made achievement more likely indicated that relationships with teachers had great impact on gifted girls' self-perceptions of ability. The following statements were taken from the domain, Ways to Know If a Teacher Likes/Doesn't Like You:

> 1. If a teacher likes you your work will probably be put up in the room.
> 2. You can almost feel who is high (popular) in the team because if a teacher likes you, you get to do a lot and you do well.
> 3. If a teacher doesn't like your work you feel like they were giving you that grade because they don't like you.
> 4. My grades are falling because of the teachers . . . and I guess because of me. We don't get along.

The girls frequently spoke about getting reputations with teachers and how a good reputation affected the way you behaved in class. Cindy, the gifted girl most often referred to by teachers in Team One as a producer, described for the researcher a series of steps she took

during the first weeks of school to make a good impression. The steps included trying hard, answering a lot of questions, being polite, and not hanging around students who caused problems. "I make a good impression and they'll remember it unless I do something really bad to change it. Then I stop answering questions except once in a while so they still know I'm trying." For Cindy, being liked by the teacher was important not only for approval reasons, but also because, once she gained the reputation, she believed she could "stay on the teacher's good side" even though her participation in class became minimal.

In contrast, Nancy, a new student at the school, described getting a reputation as having teachers "know you a long time and like your mother." Interviews with Nancy and observations of her school experiences provided rich descriptions of what occurred when the teacher didn't like you. It is important to note that Nancy's class-room behavior was the most deviant of all the gifted girls. It was difficult for her to sit still, she frequently broke rules, when she worked during class it was on assignments related to other classes, and she often failed to do homework assignments. The ramifications of gaining a reputation based on this behavior were most apparent when, sitting in the teachers' lounge, the researcher heard Nancy's teachers discuss her behavior as very "sneaky and dishonest." A resource teacher listening to the conversation commented, "Wait till I get her next term. I'll whip her into shape!" During the course of the re-searcher's observations, Nancy's behavior grew steadily worse in her teacher's eyes, despite numerous parental attempts to remedy the situation. A comment made to the researcher by one teacher drew an

interesting comparison between behaviors which had gained Nancy a
reputation as dishonest, and similar behaviors among gifted boys:

> Teacher: I have trouble looking at these gifted
> girls as being gifted. Now, Nancy maybe. I can't
> associate with her because she's new and I've only
> known her awhile, but I've known the others for
> years. Also because of her behavior. Her behavior
> isn't antisocial like the gifted boys' behavior.
> It's dishonest. When James (gifted boy) doesn't
> do his homework, it's because he sees no reason.
> Because he knows it. Nancy tells me she did it,
> but it got lost. . . . The majority of the girls
> are more interested in pleasing and doing well be-
> cause it pleases the teacher.

Beyond drawing a distinction between this teacher's perception of the
same behavior (not doing the work) acted out by a gifted boy and
Nancy, this comment illustrates two additional points. First, it
should be noted that the teacher was reaffirming the girls's beliefs
that reputations do exist and are based on long term relationships.
Second, if it is assumed that students caught in Nancy's position
would resort to excuses they viewed as most acceptable and reasonable
to teachers, then Nancy's emphasis on effort as opposed to James's use
of ability illustrated differential perceptions of teacher expecta-
tions.

Nancy often described having feelings of guilt and confusion about
her ability and motivation to do schoolwork. She informed the researcher
that teachers did not really listen to her and that she believed they
were making things up about her. The researcher's observations that
Nancy's usual peer group, composed of gifted and high achieving girls,
interacted with her less and less frequently over the duration of the
study were explained by Cindy. "She (Nancy) is getting a bad reputa-
tion with teachers."

The relationship between gifted girls' self-perceptions of ability and their affiliation needs was illustrated by their belief that being liked made success more likely. This idea surfaced during individual interviews as well as during classroom interaction when teachers were giving oral feedback on students' work. When feedback was positive it was often equated with being liked. In addition, the girls explained that they usually liked teachers who liked them, and that liking the teacher also meant that you had a better chance of doing well. When asked to give an example of this relationship the majority of the gifted girls in this study indicated that liking the teacher meant liking the subject, and if you liked the subject you would listen more and try harder. Evidence that this perception was not shared by all was found in Lynn's remark to the researcher concerning her report card. "Everyone has a best subject and mine is English. I doubt I would do better in any of my classes even if I liked the teachers." Her use of the term, "even if," however, suggested that Lynn saw this as a commonly held belief.

The significance of the girls' belief that liking a subject meant that they were more apt to do well was clearly illustrated when the majority of eighth grade gifted girls declined to register for several honors classes which were being offered at the local high school the following year. In addition to desiring to be with peers not taking honors, the girls expressed the concerns that honors classes just meant more homework, and that if they were not interested they would not be able to keep up with the class. The decision not to take honors classes unless they really liked the subject may have been reinforced after

a teacher made the following announcement in an eighth grade meet-
ing:

> Teacher: Once you write down your schedule you
> can't change it. The high school has asked us to
> tell you this so make your decision with your
> parents carefully. What your teachers recommend
> isn't set in stone, but what you write down, you
> can't change. Don't decide you are going to try
> something out! It doesn't work that way! (An
> example of honors science or regular science is
> given.)

When the researcher asked another teacher if this policy might keep a
gifted girls who did not like science now from taking further science
courses, the teacher replied, "If she didn't like the subject, why
take it? This decision came out of the team teachers' meeting. If
they don't like it, they probably won't work at it. If it's just an
ego trip they shouldn't take it."

Feelings of social competence were a second area in which the
gifted girls in this study expressed a relationship between affilia-
tion needs and perceptions of ability. In a study of girls' percep-
tions of schooling, Lomax (1978) concluded that, "peer relationships
were the most prominent feature" (p. 122). Data obtained from obser-
vations and interviews during this study supported Lomax's assertion.
Peer group membership was an important form of achievement to the
girls. Debbie, who continually told the researcher throughout the study
that she was not good at anything, noted that, "The only thing I do
is I'm in the high (most popular) crowd."

The gifted girls in this study described themselves as belonging
to a variety of social groups within the school's informal peer
organization. Lynn, an eighth grader, noted, "Some of us--like Connie,

Debbie, and Ellen--are real popular, and the rest of us--well, we're in the middle. We're not popular, but we're not unpopular. . . . What's important is having your own group." Though belonging was an important issue for all of the girls in this study, for the eighth graders its significance was reinforced by the belief that reputations, once gained, did not change. Connie explained the difficulty of gaining entry to the most popular peer group, as well as its importance:

> Connie: Here we have real set cliques. The best thing you can do is get into the popular crowd. It's no fun if you're in the others. We have three girls' cliques: the sluts, the goddy-goodies, and the main crowd. That's ours. For the guys it's the preps and the rougher crowd. The preps are wealthy. You can't be in the main crowd if you're ugly. . . . They (leaders of the crowd) pick their friends carefully. You have to be pretty and do what they want . . . unless you're in the popular crowd guys won't go with you. . . . Like, if you aren't friends with Carrie (one of the most popular eighth grade girls) you won't be asked to go with guys. Ellen's never been kicked out. She's a lover of popularity. In order not to be kicked out you have to follow, and I've been kicked out. I've cried over it so many times (being kicked out). You get talked about a lot and you feel like a fool when you go hang around them again.
> Observer: Is everyone in a clique?
> Connie: I read in a magazine that the cream-of-the-crop doesn't hang around with a clique. They don't follow. If I had the guts, I wouldn't hang around with them, but if you're out, you're nowhere. . . . I'm mainly worried about popularity. I admire people who go on their own--like Gena. (There is a long pause while Connie thinks about what she has told the observer.) This is confusing. I'm talking in opposites. Every other sentence is opposite to what I just said. My mom says I do this a lot. I have all these ideas that, if you told people, they'd think you were stupid. Good grades, respect, being a classy person, and having a good reputation are important to me
> Observer: What about the guys?

> Connie: The guys are more independent. The girls
> are afraid to go against each other. . . . Like, I
> think the clique knows what they're doing when they
> talk about people. You don't do something unless the
> clique approves. Guys aren't as bad. Like, Kate
> came running up to me to tell me Ron asked her to go
> with him and she wanted to know if I approved. I
> said, "Do you like him?" But she said that it didn't
> matter. That's what I mean by having a recommenda-
> tion.
> Observer: I'm glad you're explaining this. It's
> taken us a long time to get together for a talk, and
> this has really helped.
> Connie: I thought it would be hard to talk to you
> . . . (She laughs and looks down at the table) because
> you're older, but it's not. I was worried. I guess
> the clique teaches you to watch out what you and who
> you talk to. . . . People are totally different away
> from school. I show a lot of this. What I'm telling
> you now is what I can say when I'm away from school.
> Then there's not pressure to be cool.

Data from observations revealed that in subtle ways teachers in this middle school influenced the girls' perceptions of social competence as a form of achievement. Team teachers' classroom interaction with gifted boys was a significant factor in the way gifted girls valued and described their own social competence. This first became apparent during early observations when analysis of the data revealed that teachers using public sarcasm or ridicule often directed it at the same boys. One sixth grade boy and three seventh grade boys, all gifted, were primary targets of this public criticism. When asked why these same boys were so frequently disciplined, the girls explained that the boys were trying to show off being smarter than everyone else and that they were just "nerds." The girls believed that the behavior exhibited by gifted boys was behavior to be avoided. "They make it hard for us. Outside people think you must be weird if you're in gifted."

When pressed to describe the behaviors that made the gifted boys seem socially inept to other students, the majority of girls listed arguing with the teacher, thinking you are smarter, and always knowing the answer. Such behaviors, in addition to their perceptions of gifted boys as being physically unattractive, made the girls even more concerned with avoiding the label of gifted in order to "fit in." This was also true of eighth grade girls who frequently pointed out the lack of social competence in the gifted boys. Though eighth grade boys were rarely singled out as behavior problems, they were frequently ahead of everyone else in schoolwork, and as such, exhibited the behaviors the girls thought should be avoided. The following examples illustrate the girls' belief that social competence was a valued skill or ability:

> Jill: Some people in gifted think they are smarter than anyone and that they can get away with anything . . . like Bobby and John and David. I know they are smart, but they act smarter than everyone, and people in regular classes just think everyone is equal.
> Marie: The boys act out. Miss Davis always gets mad at Bobby.

> Nancy: (running into the gifted room out of breath) I had to run all the way here so I wouldn't be seen walking with him (a gifted boy).

> Debbie: I hate math. No one knows what he (teacher) is talking about except the real brains.
> Observer: Who are the real brains?
> Debbie: Phil and Steve and Jason (two of these boys are gifted). They'll be the only ones partici- pating. You see, they've had calculus and all that, and they're already finished with our science book. She lets them go ahead and just read it, and they passed all the tests.
> Observer: Why don't you do that?
> Connie: (laughing) We aren't that smart!
> Debbie: The gifted girls are a lot different from the gifted guys. We don't want to be different. They don't care if they are. We don't want to be odd. Look at them! Do you see the way they are?

> Connie: They're like the bottom of the barrel.
> They're really low. The way they dress! (She
> grimaces.) They're strange.

The open-space environment of the teams made it easy for the
researcher to document the frequent occasions when gifted boys were
publicly reprimanded. It should be noted that this ease of observa-
tion was also true for all students and teachers in the team area.
On one occasion, the researcher, observing in one class, overheard
a teacher at the opposite end of the team area instruct her students,
"Raise your hands, but not like Mr. Burton (gifted boy) who raises
his hand like this (she waves hers in the air) and yells, 'Miss Martin!
Miss Martin!'" When the researcher asked a student sitting nearby how
Bobby (Burton) must feel, the student indicated matter-of-factly that
Bobby was always in trouble.

In summary, the girls in this study perceived affiliation as a
means to an end. They believed that being liked by teachers was an
indication that their chances of doing well would be greater. Addi-
tionally, being liked by peers was an indication of valued social
status. Since an association with specific peer groups was impor-
tant, the girls' perceptions of teacher interaction with gifted boys
encouraged their desire to avoid being identified as gifted. Being
liked by teachers and being socially competent were measures the
gifted girls in this study used to assess their abilities.

Social Comparison

Other researchers have noted that girls do not recognize their
own strengths (Hoffman, 1975; Rubovits, 1975), and in particular,
bright girls generally underestimate their own abilities (Khatena, 1982).

The findings of this study indicated that gifted adolescent girls did underestimate their abilities in the process of determining the value others attributed to possessing these abilities. Field notes and interview transcripts revealed numerous examples in which girls made decisions about their abilities in terms of 1) the potential for specific abilities to contribute to greater social competence both at present and in the future, and 2) the amount of effort they believed they had to expend in order to achieve on a level commensurate with that of the gifted boys.

These decisions about the value of possessing abilities were made through a process of social comparison. The following example illustrates how the value of having abilities affected ability perceptions:

> Observer: I hear you are an excellent singer.
> Ellen: No. Not really. Not excellent.
> Observer: Miss Hunt (teacher) told me you sing well.
> Ellen: When I was in fifth or sixth grade I had a lot of nerve. See, I didn't care what people thought of me then, because . . . I don't know. But when I was in fifth grade I sang Tomorrow in front of the whole school. And if I had any way of changing it I would, because even if I sang OK, now people think I'm straight. . . .
> Observer: Because of the song?
> Ellen: I guess being up there by myself, people think it's weird. The boys think so. . . . I think I'd rather have friends and things than really be that good . . . 'cause it doesn't do anything for me if I sing. I mean, it doesn't get me a million dollars or anything.

Peer groups were important determiners of achievement. The girls in this study frequently talked about what other people thought in terms of the value other people attributed to certain behaviors, possessions, and abilities. Abilities or behaviors that had questionable status with peer groups were those to be avoided. When, during formal interviews, the researcher mentioned talents or abilities which were not socially valued, the girls frequently replied with comments such as Ellen's remark, "What does it get me? Boys don't think it's important" or Sally's denial,

"I don't care what anybody thinks." Ellen and Sally were members, respectively, of upper and lower status cliques.

When discussing their progress in different subject areas, the gifted girls in this study tended to compare themselves with gifted boys rather than other peers. "I usually know in the easy classes, but in the hard classes like algebra . . . a lot of the boys like Steve and Fred (two gifted boys), the smartest boys, always <u>know</u>. I usually don't understand. I don't catch on until I go home at night and look it over. Then I understand a little." Comments such as these were frequently made by the girls.

The girls' perceptions that the causes of their achievement stemmed mainly from studying and trying hard resulted in a tendency to use perceptions of effort as a measuring device when comparing themselves to gifted boys. As Debbie explained, "Tom and Bob don't have to try as hard. Their whole life is brains. . . . Their talk is scientific notation!" The result of comparison based on perceptions of effort was a tendency for gifted girls to underestimate, and in fact, devalue their ability. The majority of girls believed that they only knew the answers when they studied, and that, therefore, they were not any smarter than anyone else.

The following excerpt from field notes illustrates the girls' tendency to perceive gifted boys as more able. In early April the researcher accompanied the seventh grade gifted class on a fieldtrip to the city government building as a part of their unit on Madison's history. There the city clerk explained the importance of the computer system in use:

> <u>City Clerk</u>: Right now we're fixin' to boom! This whole area is growing so we need systems like this. (The boys crowd around, asking questions and touching the computer. Nancy and Cindy stand outside the group, next to the observer, and listen politely.)
> <u>Nancy</u>: (whispering to the observer) Why's he doing this? I'm not going into computer sciences. I want to be a dentist or a nurse . . . one that takes care of babies.

> Observer: Why do you think the guys are so interested?
> Nancy: (shrugs her shoulders) I don't know. I guess
> because they're more skilled.
> Observer: Oh, really? Why?
> Nancy: I don't know. They're just better and girls aren't.

The central role of effort in girls' perceptions of ability was also indicated in comments made by girls having difficulty in certain subjects, and those girls least able to gain an appropriate reputation with teachers. These girls blamed a lack of effort as the possible cause of their difficulties, though their ability to do anything about the situation was in question. As Ellen explained, "I try and yeah, I know I could do better. I try and I guess it's the best I can do." That Ellen never noticed the contradiction in her statements was illustrative of her confusion.

In summary, the gifted girls in this study assessed their abilities in terms of the value they perceived that others attributed to their abilities. Secondly, they compared their abilities with those of gifted boys in terms of effort. These girls tended to describe themselves as hard workers and gifted boys as real brains.

The data obtained in this study indicated the importance of social interaction in the development of gifted adolescent girls' self-perceptions of ability. These girls placed great importance on, and were very receptive to, the behaviors of significant others within the school setting. Their beliefs about ability and achievement-related issues were not only influenced by teachers and peers within the school, but were continually reinforced by others' behaviors. The desire expressed by the majority of girls to maintain their own sense of value, yet avoid the negative consequences of standing out, was illustrated in Marie's remark to the researcher:

<u>Marie</u>: I feel alone and like I have a lot of personalities . . . like I might not be normal. I act differently all the time.

The depth of this feeling of being alone was revealed in a poem written by Ellen, an eighth grader who was well-liked and a member of the most popular clique. The poem was handed to the researcher one morning during language:

One

One
This is a number of
Loneliness.
Of crying and of
Tears
Shadows of deep
Silence
Alone in wonder and
Thought
To view the miracles of
Life.

In this section factors which influenced the formation of gifted girls' self-perceptions of ability have been discussed. Definitions of giftedness held by significant others were perceived by the girls as responsible for conflict-producing situations in which their competency was publicly questioned. In an effort to avoid these situations, girls expressed a preference for teachers who expected less and tended to characterize themselves as having potential rather than ability. Affiliation needs also influenced gifted girls' self-perceptions of ability in that they believed being liked by teachers made success more likely. Additionally, being liked by peers was perceived as a form of achievement in itself. Finally, girls formed perceptions of their ability through social comparison. They frequently

expressed the belief that gifted boys possessed ability, while gifted girls put forth effort.

The self-perceptions of gifted girls in this study were found to be the result of a cyclic process in which girls used school experiences to interpret and modify their beliefs about ability and achievement, and, in turn, their beliefs about ability guided their choices of behavior at school. In the following chapter, implications of the present study are discussed.

CHAPTER V

CONCLUSIONS AND IMPLICATIONS

The purpose of this study was to describe and explain the
experiences of gifted adolescent girls in one middle school, de-
lineating the social-interactional factors which influenced ability
perceptions and attitudes toward achievement. Researchers who have
focused on gifted girls have investigated personality characteristics,
career-ability conflicts, or the mathematically gifted girl, but no
studies have investigated the formation of self-perceptions of ability
within specific contexts. In this study two broad general questions
were posed as a framework: What kinds of experiences do gifted girls
have in a middle school setting in which they are members of
heterogeneous teams as well as homogeneous gifted classes? How do
they use these experiences to construct their own behavior and self-
perceptions?

In order to identify the social-interactional factors which
influenced ability perceptions, the researcher observed in the inter-
disciplinary teams and gifted classroom of one middle school for 200
hours. These observations were conducted during the last half of the
school year. In addition, interviews were conducted with the girls,
their teachers, and five mothers. The data collected represented
the girls' interactions with teachers, peers, and educational

materials within and outside the classroom setting, and girls' speech messages concerning abilities and achievement. These concrete phenomena were used by the researcher as indicators of gifted adolescent girls' self-perceptions of ability.

The data collected were analyzed into domains using procedures described by Spradley (1980). Domains which were useful in revealing girls' self-perceptions of ability included Results of Being in the Gifted Program, Ways to Know You've Done Your Best, Kinds of Goals, Kinds of Status, Things that Are Important, Steps in Getting a Teacher to Like You, Attributes of Smart People, Differences Between Gifted Boys and Girls, and Responsibilities of Students on a Team. Data were drawn from these domains to construct taxonomies which represented the factors influencing gifted girls' self-perceptions of ability.

In this study the kinds of experiences that gifted girls had within their teams and the gifted program affected their achievement-related behaviors to varying degrees. That is, the girls' attitudes and views about themselves moderated the influence of these school experiences. Ability formation, then, was seen as a cyclic process in which girls' entering views, teachers' and peers' beliefs and be-haviors, and the organization of instruction within teams affected gifted girls' self-perceptions of ability. The following conclusions about girls' school experiences can be drawn from the findings of this study:

1) Parental and community expectations affected the development of gifted girls' beliefs about ability and achievement and their attitudes toward their own future roles. In particular, community organizations such as the church were instrumental in this process of socialization.

2) The majority of gifted girls attributed future success and happiness to being liked and accepted by others, thus social competence was perceived as an important area of achievement. To be socially competent, the majority of girls believed it was necessary for gifted students to fit in and not act smarter than others. Thus, the desire to achieve social competence resulted in a tendency for girls to devalue or underestimate their own abilities and to avoid classroom situations which required frequent public displays of knowledge.

3) The girls assessed the importance of having abilities by comparing themselves to gifted boys whom they did not consider socially competent, and to peers with high social standing. If a specific ability was perceived as having little social value, the girls did not demonstrate achievement-related behaviors or express high evaluations of their abilities in that area. For example, Ellen's belief that she was not a good singer was influenced by school experiences in which she perceived singing brought her recognition as being socially incompetent.

4) A mismatch between gifted girls' classroom performance and teachers' beliefs about ability caused teachers to question whether the majority of girls were gifted students. Teachers often compared gifted girls to high-achieving girls who volunteered more answers and appeared more motivated in class. Though teachers did not believe they treated gifted girls differently, the girls believed that teachers expected more from gifted students, often calling on gifted girls to publicly demonstrate knowledge to which they believed they had not yet been exposed. To explain their inability to meet teacher expectations,

gifted girls referred to themselves as having potential rather than ability. In addition, the girls expressed a preference for teachers who expected less over teachers who expected perfection.

5) The guiding philosophy about instruction and curriculum communicated to students through interdisciplinary team organizations influenced gifted girls' achievement-related behaviors. In Team One, where teachers advocated a content-centered approach, the gifted girls were less likely to exhibit task-commitment in class, interact with educational materials outside class, and express the belief that they were competent in a variety of subjects. These behaviors were more likely to characterize gifted girls during the year they were members of Team Two, a team which advocated a student-centered approach to curriculum and instruction. Different management strategies used by the two teams and different teacher personalities were alternative explanations for the different achievement-related behaviors exhibited by gifted girls in two different teams.

6) The girls perceived close student-teacher relationships within team organizations as a primary reason for achievement motivation. That is, they believed that teachers who liked and cared about them behaved differently, giving them increased chances to perform successfully. Additionally, girls believed that building reputations as students who put forth effort decreased the teacher's tendency to call on them during class, thus enabling them to avoid public performance.

7) The competitive system used in Team Two, one which based classroom seating and the distribution of rewards on grade point averages, was described by gifted girls as a technique which motivated and

encouraged them to achieve. At the same time, however, these girls expressed high levels of anxiety about teachers' and peers' perceptions of their performance, believing that competition was especially diffi- cult for gifted girls who were expected to know the answer. The girls described the situation as one in which negative sanctions resulted both from not knowing the answer and knowing the answer too often.

8) The girls who had the least social status perceived the gifted program most positively, describing it as the context in which they were most able to be themselves. For the majority of girls, the gifted program was one in which they believed they could express themselves more freely without negative sanctions.

9) The majority of gifted girls believed their successful school experiences resulted from effort and their failures from lack of moti- vation. This belief supported their perception that gifted girls had potential rather than ability. The one student who believed her achievements were not related to effort was least able to do well and most negatively perceived by teachers. In contrast, gifted boys' achievements were described by girls as resulting from ability.

As previously stated, ability formation was seen as a cyclic process in which girls' entering views, teachers' and peers' beliefs and behaviors, and the organization of instruction within teams affected girls' achievement-related behaviors and beliefs about ability. That the girls used school experiences to interpret and modify their be- liefs about ability, and, in turn, that their beliefs about ability guided their choices of behavior at school were illustrative of this cyclic process. From gifted girls' perceptions of school experiences,

three factors were identified as influential in the ability formation process. These factors are as follows:

1) Multiple definitions of giftedness. The girls believed that the definitions of giftedness held by significant others within the school setting led to confusing expectations. In turn, these expectations brought about conflict-producing situations in which girls perceived their chances for failure were increased, and thus, their competency questioned. The multiple definitions of giftedness held by significant others led the girls to frequently express concern over the possible public disclosure that they did not know the answer and a fear of peer rejection if they appeared too bright. In order to cope with this conflict and preserve their own sense of competence, the girls frequently referred to themselves as having potential, but as being no different or smarter than other girls.

2) Affiliation needs. The girls believed that being liked by teachers meant that they would be given more chances to do well and that their work would be perceived more favorably. Thus, affiliation was a means to greater achievement. In addition, membership in popular peer groups was believed to be a sign of social competence, and thus, a valued form of achievement in itself.

3) Social comparison. The girls made decisions about their abilities by comparing themselves to peers with high social standing and to gifted boys. These decisions about ability took into consideration 1) the potential for specific abilities to contribute to greater social competence both at present and in the future, and 2) the amount of effort girls believed they expended in comparison to gifted boys.

In summary, the studied gifted girls experienced a conflict between the high expectations others attributed to gifted girls and the behaviors required to achieve social acceptance. In order to maintain a sense of competence in both their academic and social worlds, the majority of girls described themselves as having potential and their successful achievements as resulting from effort. Thus, these gifted girls were more likely to demonstrate achievement-related behaviors in team situations where teacher-student relationships were characterized as close, and girls believed their efforts would be perceived more favorably.

Relationship of the Findings to Previous Studies

Research on perceptions of ability has focused on the feelings of causality that accompany successful and unsuccessful achievement (Covington & Beery, 1976; Weiner et al., 1971), and the role of context factors in the formation of ability perceptions (Rosenholtz & Simpson, 1984; in press). Since ability perceptions are viewed as a central component in achievement-related behavior, researchers have attempted to understand what feelings or environmental influences might affect an individual's desire to pursue and accomplish tasks in the future.

Studies conducted with early adolescents have investigated the influence of significant others on adolescents' attitudes toward achievement and ability (Schmuck, 1962; 1963; Brookover et al., 1964; Parsons et al., 1982; Pittman, 1979). These studies found that a significant positive relationship exists between students' perceptions

of the evaluation of parents, teachers, and peers, and students' per-
ceptions of their own ability. Pittman (1979) noted that the influence
of parents may be particularly important for early adolescent females.
Studies which have looked specifically at how classroom structure may
affect student beliefs about ability have concluded that high resolution
or unidimensional structures may provide fewer options for students to
demonstrate ability, and that, as a result, ability becomes more
narrowly defined and a greater student-teacher consensus results
(Rosenholtz & Rosenholtz, 1981; Rosenholtz & Wilson, 1980; Simpson,
1981; Weinstein et al., 1985). Factors which influence perceptions
of ability are important because, as Mason and Stipek (1985) noted,
student perceptions of ability influence students' emotional involve-
ment in tasks.

Researchers who have looked specifically at females have indicated
that the need for social acceptance may hinder achievement motivation
(Crandall, 1967; Hoffman, 1975; Rubovits, 1975; Sherman, 1971), that a
possible disposition to avoid success may exist (Horner, 1972; 1975;
Lavach & Lanier, 1975), and that a fear of negative consequences
which could result from success in specific contexts may affect motiva-
tion (Cook, 1976). Other researchers have concluded that studies of
achievement motivation in females have failed to consider that males
and females may have different achievement values. That is, that social
competence or affiliation should not be viewed as hindering achievement
motivation in females, but that it should be viewed as an area in
which women are motivated to achieve (Stein & Bailey, 1975). No
studies have addressed the formation of ability perceptions in gifted

adolescent girls, but researchers have noted that obstacles to women's achievement may affect females who have the greatest ability to the greatest degree (Blaubergs, 1978; 1980; Callahan, 1979; 1981; Fox, 1978; Horner, 1975).

The present study focused on the school experiences of gifted girls and the context factors which influenced the development of their perceptions of ability. The rich and detailed data collected provided evidence that the formation of gifted girls' self-perceptions of ability was influenced by social interaction, and in particular, their perceptions of relationships with significant others. Three factors were identified as influential: multiple definitions of ability, affiliation needs, and social comparison. These factors indicated the importance of teacher and peer evaluations in the construction of gifted girls' self-perceptions.

In this study the structure of the teams in which the girls were members mediated the influence of these factors. Both teams resembled the unidimensional organization described by Rosenholtz and Simpson (1984; in press). That is, low task differentiation, low student autonomy, and evaluation systems which reflected narrowly focused criteria gave the gifted girls few options to demonstrate their competence beyond the structure offered by the teams. For girls labeled as gifted and expected to perform as such, narrow definitions of ability resulted in confusion and lack of motivation because their talents did not always match teachers' and peers' definitions of ability. By describing themselves as having potential rather than ability, it appeared that the gifted girls in this study were able to cope with

their own desire to fulfill teacher expectations, but their inability
to always do so. This conflict surfaced frequently in Team Two where
the Dynamic Dozen technique imposed constant competition, direct com-
parison among and between students, and a system of reward for obtaining
the highest grade point average. Having ability became synonymous with
knowing the answer. For girls labeled as gifted, narrow definitions
of ability resulted in a variety of strategies to avoid public exposure
in case they did not know the answer, and, at the same time, to avoid
standing out as someone who always knew in a system of strict stratifi-
cation. Such strategies included sitting in the back of the room and
not volunteering answers in class. Narrow definitions of ability also
caused discomfort for teachers who were unable to understand the
mismatch between such conceptions of ability and gifted girls'
performance.

Rosenholtz and Rosenholtz (1981) noted that ability stratification
could affect one's life chances, enhancing or limiting capacity, to
the degree that one was influenced by the perceptions of significant
others. The findings of this study indicated that perceptions of
teachers as flexible and positive instructors could also act as
buffers, modifying the effects of narrow conceptions of ability. For
the girls who perceived Team Two as a family and a climate in which
they received more chances to do well, greater effort and desire to
achieve resulted. Additionally, girls who believed they were liked
by teachers believed that they had a better chance of doing well. For
these gifted girls, obtaining a reputation as a hard worker helped them
avoid conflict-producing situations in which public performance might

result in negative consequences. Affiliation, then, was perceived as a means to greater achievement by the girls in this study.

Related to the findings of other researchers who noted the influence of significant others (parents and teachers) on girls' notions about ability and achievement (Pittman, 1979), and the possible influences of the community on girls' specific-subject self-concepts of ability (Brookover et al., 1964), the findings of this study indicated that girls' perceptions of what was acceptable achievement were influenced by parents and the school community. The girls frequently discussed parental expectations and compared themselves to peers with high social status. In turn, their perceptions of acceptable achievement influenced their notions about ability. Valued abilities were those which were seen as contributing to greater social competence.

As Weinstein et al. (1982) found, the gifted girls in this study did perceive differential teacher behaviors toward gifted and regular students. The girls believed that gifted students were expected to know more and produce more with less instruction and less teacher help. In addition, the girls perceived that gifted boys and teachers interacted in different ways than gifted girls and teachers, but that these differential interactions between gifted boys and teachers were not always preferable. For example, in this study gifted boys were often pointed out by teachers as behaving inappropriately by calling out answers or acting loudly in class. The frequent public criticism of gifted boys, in combination with the gifted girls' perceptions that these boys were socially incompetent, may have contributed to the girls' desire to avoid the label of giftedness. An appropriate way

of accomplishing this was to insist that they were no different from other girls. They believed gifted boys were able, but they, themselves, simply worked hard.

To summarize, the present study indicated that gifted girls' self-perceptions of ability were influenced by 1) the perceived evaluations of others, 2) the belief that being liked by teachers made achievement more likely, and 3) the belief that social competence was a valued achievement itself. The organization of curriculum and instruction within the teams motivated girls to achieve, and promoted positive perceptions of ability, to the extent that girls perceived the learning environment as a place where teachers cared and where they would be given more options and frequent chances to do well.

Use of Findings to Researchers

The present study may be of use to researchers in middle school and in gifted education in three ways. First, the study represents the use of a methodology not often utilized in either area. Second, the detailed descriptions highlighted a number of variables which could be further investigated by researchers interested in middle school and gifted education. Third, the findings suggest questions to be addressed in future research on gifted middle school girls. These possible uses are discussed below.

Toepfer and Marani (1980) noted that naturalistic methods are promising new approaches to learning more about middle schools and the age group they serve. This study illustrates that the use of such a

methodology can be most beneficial in its ability to yield products which increase our understanding of adolescents, as well as illuminate the range of teaching-learning experiences that impact on students' behavior. That is, naturalistic methods, because they do not impose preestablished categories of data collection upon the setting, enable us to view school experiences through the eyes of the participants. Additionally, rather than isolating variables for investigation, naturalistic methods allow the examination of a cluster of inter-relating variables that, together, may have a differential impact on students. In order to increase our understanding of factors that influence the formation of gifted middle school girls' self-perceptions of ability, researchers need to have access to qualitative, natural-istic investigations conducted in various contexts. The present study provides one example of how this can be accomplished.

In qualitative data collection and analysis the broad perspec-tive employed reveals a number of variables which may have bearing on the questions of interest. In this study, girls' self-perceptions of ability and achievement motivation were found to be related to several variables including home and community influences, teacher-student relationships, team teachers' organization for instruction, competition, the perceived evaluations of others, the desire for social competence, and personal values. Findings of the present study indicate that these variables form a complex pattern of forces which interact to influence gifted girls' self-perceptions of ability and achievement-related behavior. Future research on females' achievement motivation may benefit from a more comprehensive approach which seeks to integrate

these variables rather than investigate them in isolation. This approach may produce significant contributions to our understanding of how school contexts contribute to students' formation of ability perceptions.

A number of research questions are suggested by the present study. These questions relate to the variables that were found to influence gifted girls' self-perceptions of ability. A question which surfaced throughout the study concerned the role of the girls' personal values in the formation of ability perceptions. When the girls perceived school tasks as unrelated to their future roles or inappropriate for females, did they correspondingly devalue their abilities in those areas? For example, did Nancy's belief that computers were not important in her future influence her perception that boys were more skilled with computers than she? If gifted girls form ability perceptions in connection with their perception of a task's importance in their future, will the formation of ability perceptions be influenced by exercises designed to promote and clarify the future importance of a task? That is, will gifted girls' perceptions of ability be influenced by curriculum designed to increase the range of tasks girls perceive as important in their future?

Additional questions concern the effects of narrow task structures and an emphasis on public and comparable performance evaluations which characterize traditional classrooms (Rosenholtz & Simpson, in press). If such a unidimensional organization results in narrow conceptions of ability shared by students and teachers within the classroom, how does this shared definition of ability affect students

who are labeled as gifted by an outside source? Is the effect different for males and females? The present study suggests that girls believed themselves to be more sensitive to teacher definitions of giftedness, and that narrow task structures and competitive evaluation systems led gifted girls to believe that ability was knowing the answer. Would the less competitive environment in multidimensional classrooms, where ability conceptions are more fluid and options for demonstrating competence more available, encourage gifted girls to develop more positive self-perceptions of ability?

Other questions suggested by this study concern the role teachers play in the identification of students for testing into gifted programs. Do teachers in unidimensional and multidimensional classrooms select different types of students for testing? If so, what criteria do they use? Is evidence of gifted behavior which would result in selection of a student for testing more limited in a unidimensional classroom? Would teachers in a unidimensional classroom more often select girls, or as suggested by this study, would they perceive boys as more gifted?

Still another question suggested by this study concerns the gifted girls' belief that being liked increased their chances of doing well. Does interdisciplinary team organization increase girls' beliefs that they are liked by encouraging closer student-teacher relationships? How do different teacher personalities mediate the effects of narrow task structures and competitive evaluation? More specifically, what kinds of students do gifted adolescent girls believe teachers like? In what ways do teachers communicate positive acceptance of gifted girls' contributions?

Still other questions relate to the effects of gifted girls' perceptions about effort. In this study the gifted girls believed that liking a subject increased their chances for success because they were more apt to put forth effort, that is, to listen and complete assignments, in subjects they liked. The majority of girls also attributed their successes and failures to the amount of effort they expended. As a result of this emphasis on effort rather than ability as a cause of success, do gifted girls concerned about doing well prejudice their futures by prematurely limiting their curriculum choices in middle and high school to subjects they like at present?

Finally, this study suggests several questions about gifted girls' attitudes toward school. Do gifted girls shy away from subjects not generally perceived as acceptable areas of achievement for girls more than other girls because the label of giftedness has already set them apart? Do girls in rural schools have different attitudes toward achievement than girls in urban schools? Insight into these questions may help explain why gifted girls are more likely to underestimate their ability.

Use of the Findings to Practitioners

Although the specific findings from this study should not be generalized to other populations, the detailed descriptions of interactions within one school reveal the complexity of the interplay between gifted students and the school context. As such, this study has implications for teachers in both gifted and regular classrooms, teacher educators, and curriculum specialists.

Descriptive data from this study can serve to convey to teachers, especially those with no background in gifted education, what it is like to be a gifted adolescent girl. Teacher sensitivity to individual students' perceptions of classroom events is important, for students are clearly interpreters of classroom reality (Rosenholtz & Simpson, 1984; Weinstein, 1983), and messages sent in classrooms may affect individual students' perceptions of ability in different ways. For gifted adolescent girls, the focus on ability which comes with the label of giftedness presents a conflict between achievement expectations and social competence. Teacher awareness of the variables involved may help gifted girls who value close student-teacher relationships resolve this conflict. Thus, the importance of descriptive data such as that provided by this study is in its use to increase teacher awareness, and thus, enhance sensitivity toward the needs of this subgroup of students. As Chodorow (1974) noted, to remain unaware of the sense of worth that develops in girls today is to ignore a growing set of problems.

> Sex-role development of girls in modern society
> is more complex. On the one hand they go to school
> to prepare for life in a technologically and
> socially advanced, complex society. On the other
> hand, there is a sense in which this schooling is
> pseudo-training. It is not meant to interfere
> with the much more important training to be
> "feminine" and a "wife and mother." (p. 55)

The importance of teacher definitions of giftedness was a major finding of this study, and has implications for teachers, themselves, as well as teacher educators. Symbolic interactionists postulate that an individual's definition of reality affects that individual's

choice of behaviors (Blumer, 1969; Mead, 1934). In this study, the structure of the curriculum and an emphasis on public and comparable performance evaluation contributed to teachers' definitions of ability. The mismatch between these definitions and the classroom performance of the majority of gifted girls caused teachers to question the girls' identification as gifted. In turn, these girls believed that teachers often put them in conflict-producing situations in which their competency was questioned. Failure to get the right answer in those situations was perceived by girls as an indication that they had potential rather than ability. Thus, in this study, teacher definitions of ability influenced gifted girls' self-perceptions of ability. For teachers, this series of events implies the need to encourage more open, flexible definitions of ability, as well as the need to be sensitive to students' interpretations of value systems. This is expecially important when students' notions of ability are influenced by the perceived evaluations of significant others, as the gifted girls in this study illustrate.

For teacher educators, this series of events implies that some introduction to the needs and nature of gifted students should be included in the preparation of all preservice teachers. Additionally, in the educational programs for teachers of the gifted, emphasis should be placed on the needs of special groups of gifted students such as gifted girls. Teacher educators should help teachers explore alternative definitions of giftedness, and the implications of such definitions for appropriate curriculum and effective programs.

The influence of student-teacher relationships on gifted girls' achievement-related behaviors was an important finding in this study which has implications for teacher organization. The studied gifted girls were more likely to demonstrate achievement-related behaviors in team situations where student-teacher relationships were characterized as close, and girls believed their efforts would be perceived more favorably. While individual teacher personalities within the two teams studied contributed to the ability of the team, as a whole, to foster such closer relationships, students believed that being members of teams made the existence of such relationships more likely. Thus, teacher organization which promotes the sharing of a set number of students among a core group of teachers, facilitating close student-teacher relationships, may promote achievement motivation and positive ability perceptions in gifted adolescent girls at a time when sex-role identification and the tendency to conform may inhibit achievement.

Curriculum specialists have noted the need for the development of different strategies in the education of gifted girls (Callahan, 1981). The implications of this study for curriculum development point to the need for the following strategies:

1) Activities are needed which enable gifted girls to interact with female role models who present the image of being successful both professionally and socially.

2) Activities are needed which promote and clarify the value of math and science within tasks girls perceive as appropriate and important areas of achievement for females. Such activities may keep girls from prejudicing their futures by limiting their present efforts in math and science at a young age.

3) Regular and individual interaction with adults who are talented in areas in which girls express ability or interest should be provided. Such mentors may fill the need gifted girls feel for affiliation, providing support and encouraging achievement motivation.

4) Activities should be provided which allow girls to investigate a wide range of career options in a warm and supportive environment.

Thornburg (1985) noted the importance of alerting middle school teachers and teacher trainers to the fact that, in today's society, "Early adolescents are growing up faster. . . . Their self-worth seems more fragile" (p. 23). Gifted adolescent girls need teachers who are sensitive to the effects of classroom context variables on the formation of ability perceptions, and who examine the effects of their own perceptions and beliefs on students' self-perceptions. To prepare such middle school teachers, teacher trainers need to emphasize instructional organization and curriculum strategies which encourage the development of a positive sense of worth among gifted girls. Positive perceptions of ability are central to achievement motivation, and, as such, strategies which enable gifted adolescent girls to more fully understand their own abilities may have great bearing on their accomplishments in later life.

APPENDIX A

LETTER OF PERMISSION

November 1983

Dear Parents,

Your permission is requested for your daughter to participate in a study of gifted girls' perceptions of school. Participation in this study will not entail any special treatment or removal of your daughter from her regular classroom routine.

In order to conduct this study, I will be observing in your daughter's classrooms approximately 10 hours per week for 17 weeks, examining students' work and other classroom materials, reviewing school and class records, and informally questioning the teachers and students about my observations. Finally, I would like to talk to you about your observations of your gifted daughter's perceptions of school. There is a place at the bottom of this letter for you to indicate whether you will be willing to participate in this part of the study.

Your daughter will be protected by an anonymous coding procedure during the observation process. Information from students' records will be kept confidential. Student, class, and school names will not be used in connection with this study.

There are no risks and no immediate benefits to your daughter as a result of this study. You are free to withdraw your consent at any time. No monetary compensation will be awarded for participation. However, I will be happy to answer any questions you may have about the study, and to share the results once the study is completed. I anticipate that this study will be beneficial to adults who are concerned with the development of achievement, motivation, and self-concept in gifted adolescent girls.

...I would appreciate your permission to observe in your daughter's classrooms, ask her questions about her school experiences, examine materials, and review records. If you have any questions concerning the study, please contact me.

Linda Kramer, Principal Investigator
General Teacher Education
392-0751

I have read and understand the procedure described above. I have received a copy of this description and agree to allow my daughter, _____,
to participate in the study.

SIGNATURES:

_____   _____

Parent/ Guardian   Date

_____

Relationship to Subject

I agree/ do not agree to be interviewed at my convenience concerning my daughter's perceptions of school. (Please circle one.)

APPENDIX B

GROUP INTERVIEW WITH GIRLS

1. Describe a really good day at school. What kinds of things make it good? How do you behave when you have a really good day?

2. Now tell me about a really awful day. What happened to make it so bad? If you decided to talk to someone about this, to whom would you go?

3. What kinds of things do you do best? Would your friends say this about you? Your teachers?

4. How do you know when you've accomplished something really important?

5. What makes you want to do your very best? Do you feel this way often?

6. When you are unsure of yourself, how do you behave?

7. How would you describe yourself to someone who doesn't know you? Do others see you this way? Would any of your teachers see you this way?

8. What do you think students are missing if they go to a school that doesn't have teams like yours?

9. Does coming to enrichment once a week change the way other students see you? Teachers? Is it important for you to go?

1. In what ways do you think interdisciplinary teams are an important way to meet the needs of middle school students?

2. Some students remain as members of your team for two years. How does this affect their relationships with teachers and peers? Their leadership abilities? Their academic progress?

3. Think about the gifted girls who have remained as members of your team for two years. Would you say that your comments are true of these girls also? Can you give some specific examples?

4. How do you define giftedness? How are the gifted girls on your team alike? Different?

5. Do you notice any differences between the gifted girls and gifted boys in terms of their achievement motivation?

6. Do you have different goals and objectives for gifted students? Do you treat them differently in any way?

APPENDIX D

INTERVIEW WITH MOTHERS

1. Who is (daughter) closest to in your family? Does she confide in or model anyone's behavior?

2. Who goes to school functions like conferences for your daughter?

3. Tell me about her adjustment in school as she has moved from team to team. For example, have you noticed any changes in her motivational level, grades, participation, or friendship patterns?

4. How long has (daughter) been in the gifted program? How do her friends and teachers react to her participation in the program?

5. How does (daughter) use her study time? Do you motivate her in any way? Punish or reward her?

6. Does (daughter) have a lot of personal confidence? How does she show it?

7. Does she indicate a desire to conform or "fit in" a lot? Do you talk about this?

8. What are her future goals? Do you encourage her in these goals?

APPENDIX E

INDIVIDUAL INTERVIEWS WITH GIRLS

Directions: This is a chance for you to think about how you feel as a
student at this school. Everyone answering these will have different
answers, so be sure your answers reflect how you feel. Listen to each
statement and then select one of the following categories as your
answer: not at all, once in a while, often, or all the time. When we
finish this, I'd like to talk about some of your answers.

1. I look forward to going to school.

2. My teachers like me.

3. Students listen when I say what I think.

4. School work is boring.

5. I have many friends at school.

6. I am learning a lot at school.

7. I always do my best work.

8. My teachers listen carefully to my ideas.

9. At school there is too much pressure to be perfect.

10. If I know the answer to a question, I always raise my hand.

Adapted from Whitmore, 1980, Appendix L.

APPENDIX F

INTERVIEW WITH PRINCIPAL

1. Is there a need for a gifted program here?

2. What do you think about the program? How do parents react to it?
   Teachers?

3. What special problems do gifted students have here? Are any of
   these problems unique to gifted girls?

4. Why do you think many of the gifted eighth grade girls are not
   signing up for advanced high school courses?

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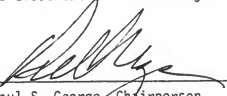   cultural context (pp. 23-44). New York: David McKay.

BIOGRAPHICAL SKETCH

Linda R. Kramer was born in Tampa, Florida. She received the Bachelor of Arts in secondary education with a minor in social studies from the University of Florida in 1974. After teaching two years in Ocala, she moved to Jacksonville where she taught middle school for five years. During that time she received her Master of Education in administration and supervision from the University of North Florida.

In 1981 Ms. Kramer entered the doctoral program in curriculum and instruction, specializing in middle school and gifted education. During her four years in the program she worked as a research assistant and taught undergraduate classes in social studies methods. She also taught and supervised preservice elementary education majors. She will receive the Ph.D. from the University of Florida in 1985.

Ms. Kramer has served as assistant professor in the Curriculum and Instruction Department at the University of Kentucky since January, 1985.
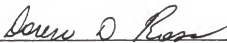
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Paul S. George, Chairperson
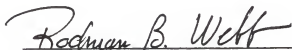Professor of Educational Leadership

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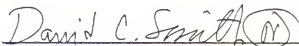of Education

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This dissertation was submitted to the Graduate Faculty of the College of Education and to the Graduate School, and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

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